

LBT-G3000

SERVICE MANUAL

US Model
Canadian Model

LBT-G3000 is composed of following models.

As for the service manual, it is issued for each component model, then, please refer to it.

COMPONENT MODEL NAME FOR THESE SYSTEM

Stereo Deck Receiver	HCD-G3000
Speaker System	SS-G3000

PARTS LIST

NOTE :

- Items marked “ * ” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Part No.	Description
1-501-374-11	ANTENNA, LOOP
1-501-659-41	ANTENNA (FM)
3-758-592-61	MANUAL, INSTRUCTION (US) (ENGLISH)
3-758-592-71	MANUAL, INSTRUCTION (Canadian) (ENGLISH, FRENCH)
* 4-971-631-01	INDIVIDUAL CARTON (US)
* 4-971-632-01	INDIVIDUAL CARTON (Canadian)

Part No.	Description
1-467-430-11	COMMANDER, STANDARD (RM-S221)
2-181-754-21	COVER (MLY), BATTERY (FOR RM-S221)
* 3-376-136-01	CUSHION (HALF) (HCD)
4-937-945-11	PLATE (TRANSPORT), LOCK (HCD)
* 4-963-173-11	CUSHION (HCD)
* 4-964-535-01	CUSHION (SS)

COMPACT HI-FI STEREO SYSTEM
SONY[®]

HCD-G3000

SERVICE MANUAL

*US Model
Canadian Model*



HCD-G3000 is the tuner, deck,
CD and amplifier section in
LBT-G3000 respectively.

CD Section	Model Name Using Similar Mechanism	HCD-A195
	Base Unit Name	BU-5BD13
DECK Section	Model Name Using Similar Mechanism	HCD-A195
	Tape Transport Mechanism Type	TCM-180VW-H10

SPECIFICATIONS

Tuner

System	FM stereo FM/AM superheterodyne tuner
FM tuner section	
Tuning range	87.5 to 108 MHz
Antenna	75 ohms unbalanced 300 ohms balanced
Intermediate frequency	10.7 MHz
AM tuner section	
Tuning range	530 to 1,710 kHz
Antenna	AM loop antenna External antenna terminal
Intermediate frequency	450 kHz

Amplifier

Continuous RMS power output
25 W + 25 W (6 ohms, at 1 kHz, 5% THD)

Input	Jack type	Sensitivity	Impedance
VIDEO	Phono	300 mV	47 kilohms

Output	Jack type	Impedance
HEADPHONES	Stereophone	Accepts headphones of 8 ohms or more

Frequency response 15 Hz to 50 kHz ± 0.5 dB

Cassette deck

Recording system	4-track 2-channel stereo
Frequency response	DOLBY NR OFF With Sony Type II cassette 40 Hz to 14 kHz (± 3 dB) With Sony Type I cassette 40 Hz to 13 kHz (± 3 dB)
Wow and flutter	0.1% (WRMS)

Compact disc player

Laser	Semiconductor laser
Wavelength	780 - 790 nm
Frequency response	2 Hz to 20 kHz (± 0.5 dB)
Signal-to-noise ratio	More than 93 dB
Dynamic range	More than 90 dB
Harmonic distortion	Less than 0.01% (1 kHz)
Channel separation	More than 90 dB (1 kHz)

General

Power requirements	120 V AC, 60 Hz
Power consumption	100 W
Mass	Approx. 10.8 kg (23 lb 13 oz)
Dimensions	Approx. 355 x 395 x 405 mm (14 x 15 5/8 x 16 inches) (w/h/d, including projections)

—continued on next page—

COMPACT DISC DECK RECEIVER
SONY®

SAFETY CHECK-OUT

Supplied accessories

FM wire antenna	(1)
AM loop antenna	(1)
Remote commander RM-S221	(1)
Batteries Sony SUM-3 (NS)	(2)

Design and specifications are subject to change without notice.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.


During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.



NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.

"DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

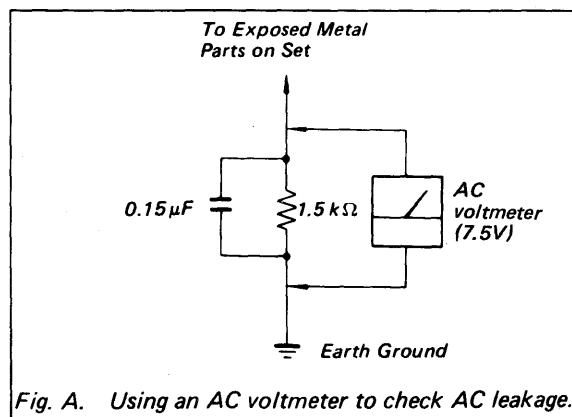
After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

Check the metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 5 mA. Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 7.5V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 20V AC range are suitable. (See Fig. A)



ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!


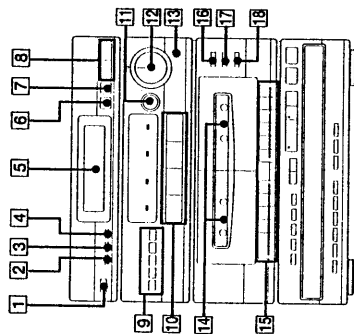
LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE  SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

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Location of Controls

Refer to the pages indicated in parentheses for details.



Tuner

- 1 POWER switch (7)
- 2 MEMORY button (11)
- 3 STEREO/MONO button (10)
- 4 TUNING/PRESET button (9, 11, 12)
- 5 Display window
- 6 BAND button (9)
- 7 SHIFT button (11, 12)
- 8 DUAL MODE TUNING +/- buttons (9, 10, 11, 12)

Amplifier

- 9 PRESET EQUALIZER buttons and indicators (8)
- 10 Function selectors and indicators
- 11 SURROUND control (8)
- 12 VOLUME control (8)
- 13 HEADPHONES jack (8)

Cassette Deck

- 14 Cassette holders
- 15 Tape operation buttons (13)
- Leftward fast winding
- Rightward fast winding
- Forward play
- Stop/eject
- PAUSE Pause
- REC Record (only for deck B)
- DOLBY NR (Noise Reduction) (ON/OFF) switch (13, 14, 16)
- TAPE SELECT (TYPE I/TYPE II) button (13, 14, 16)
- DUBBING SPEED (HIGH/NORMAL) button (16)

SECTION 1 GENERAL

This section is extracted from instruction manual.

Compact Disc Player

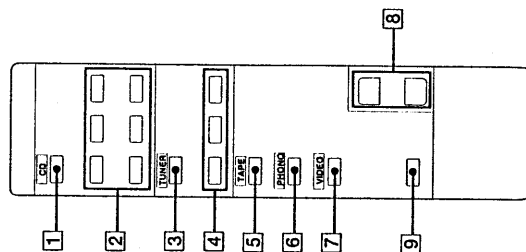
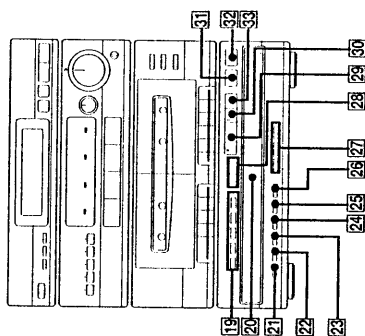
- 19 DISC SELECT 1-5 button (17, 19, 20, 21, 22)
- 20 Disc Tray
- 21 TIME button (18)
- 22 REPEAT button (23)
- 23 MUSIC SCAN button (24)
- 24 CHECK (program check) button (22)
- 25 CLEAR (program clear) button (22)
- 26 EDIT button (26)
- 27 PLAY MODE buttons
- CONTINUE button (20, 22, 27)
- SHUFFLE button (20)
- PROGRAM button (21, 23)
- Left/Right/Stop/Play/AMS* buttons (19)
- Play button and indicator (17)
- Pause button and indicator (17)
- DISC SKIP button (17, 19)
- Open/Close button (17)
- Stop button (17)

* AMS is the abbreviation of Automatic Music Sensor.

Remote Commander RM-S221

- 1 CD function button
- 2 CD operation buttons
- DISC SKIP button, Left/Right/Stop/Play/AMS* buttons, Play button, Pause button, Stop button
- 3 TUNER function button
- 4 Tuner operation buttons
- SHIFT button
- PRESET +/- buttons
- These buttons are used to select the preset station number.
- 5 TAPE function button
- 6 TAPE button is inoperative with this unit.
- 7 VIDEO function button
- 8 VOL. (volume) +/- buttons
- 9 SELECT 5 button
- Each time the button is pressed, the preset equalization switches among 5 preset patterns (FLAT, DANCE, POPS, ROCK and CLASSIC).

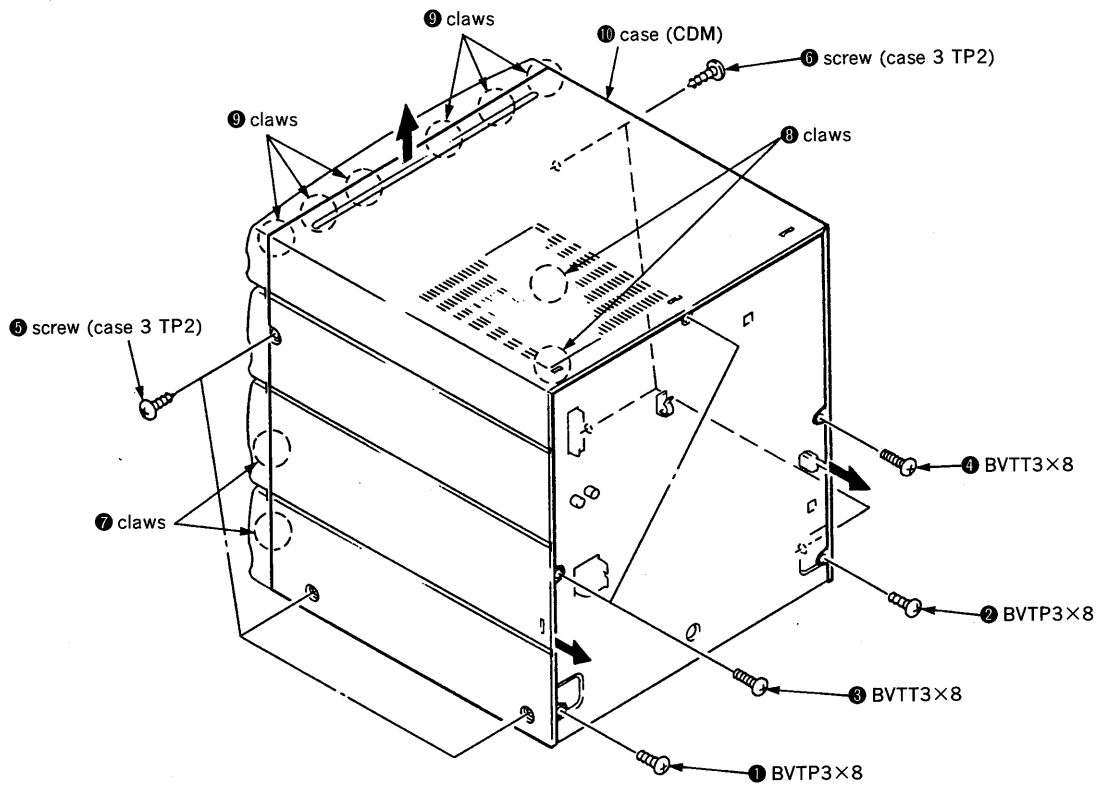
* AMS is the abbreviation of Automatic Music Sensor.



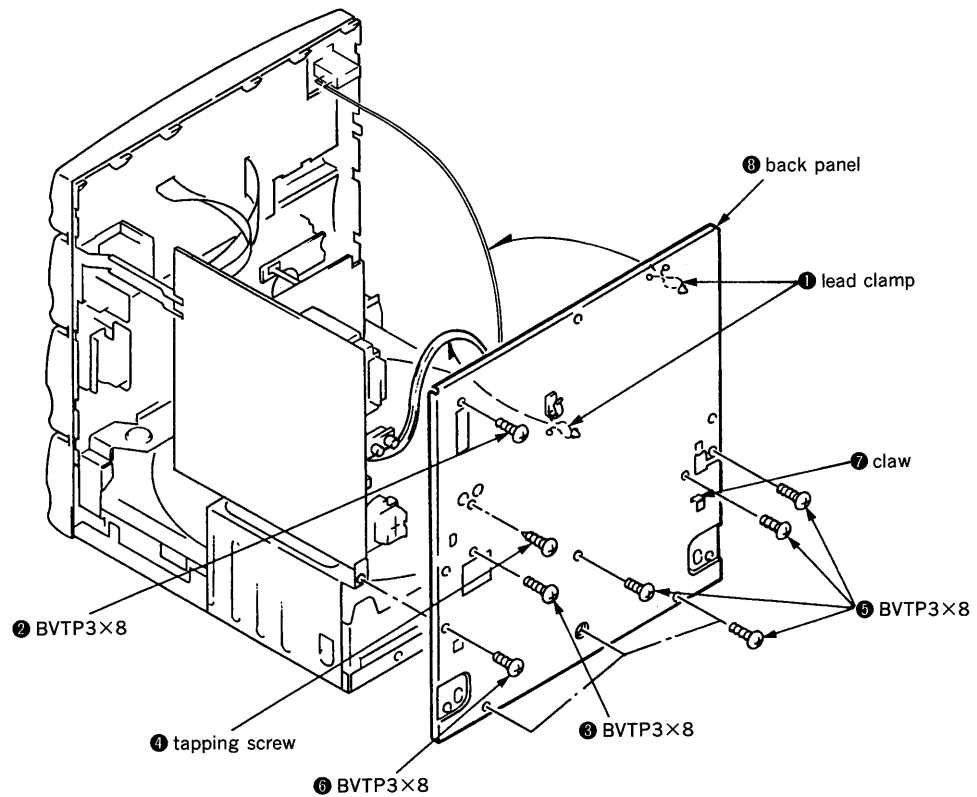
SECTION 2 DISASSEMBLY

Note : Follow the disassembly procedure in the numerical order given.

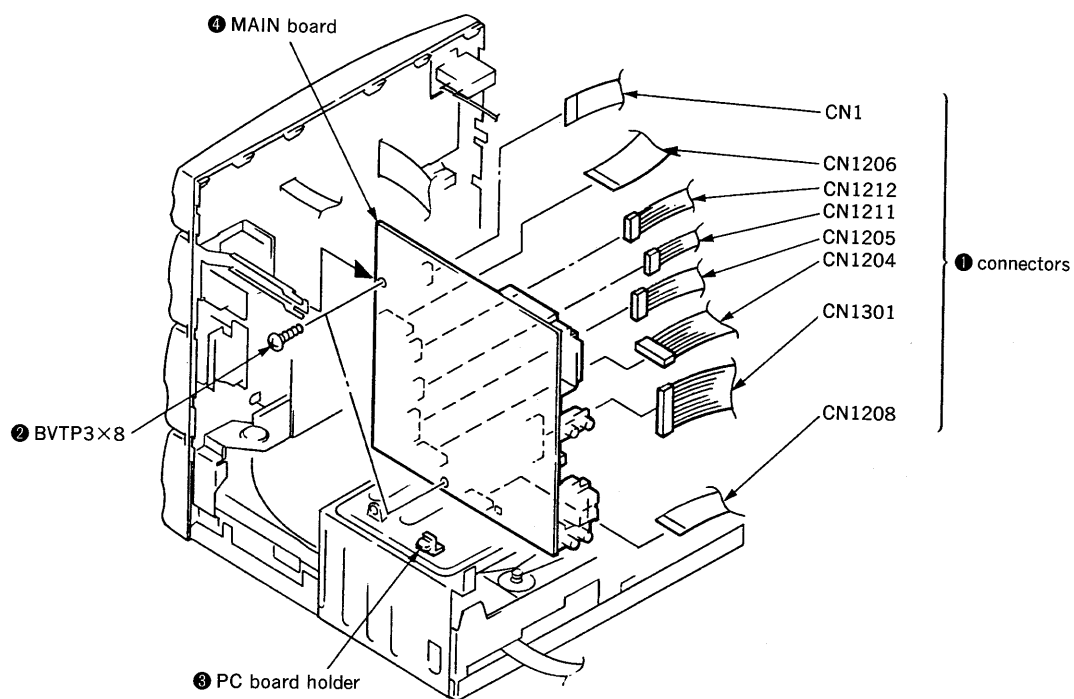
2-1. CASE (CDM)



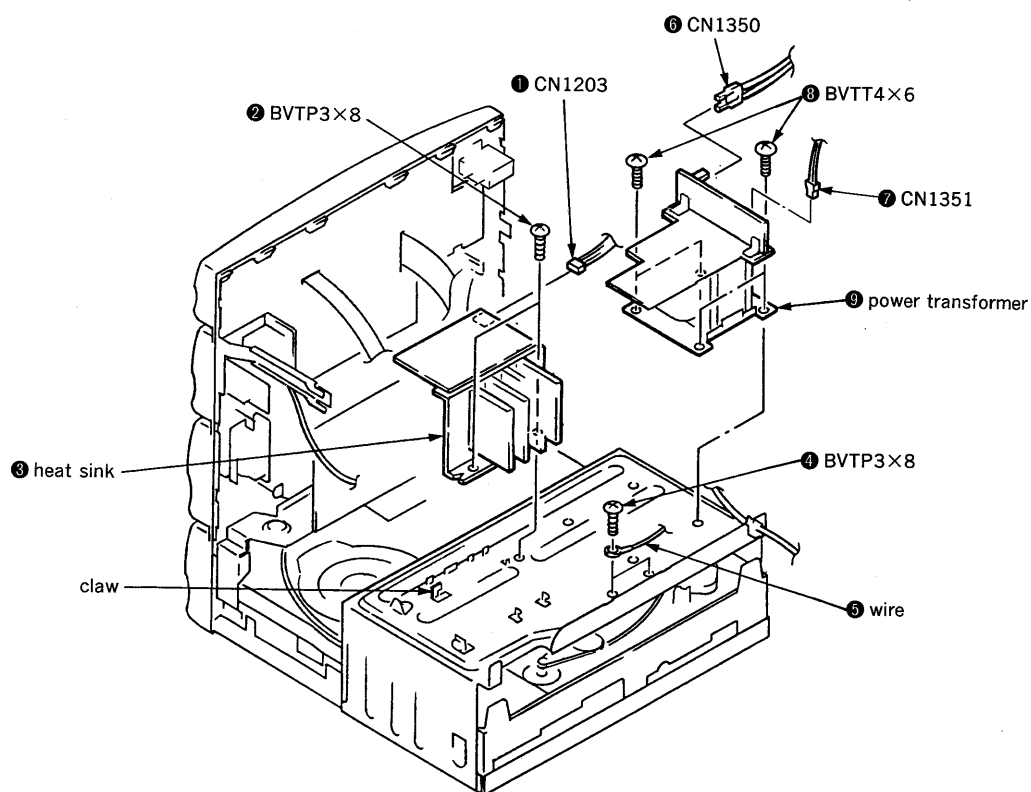
2-2. BACK PANEL



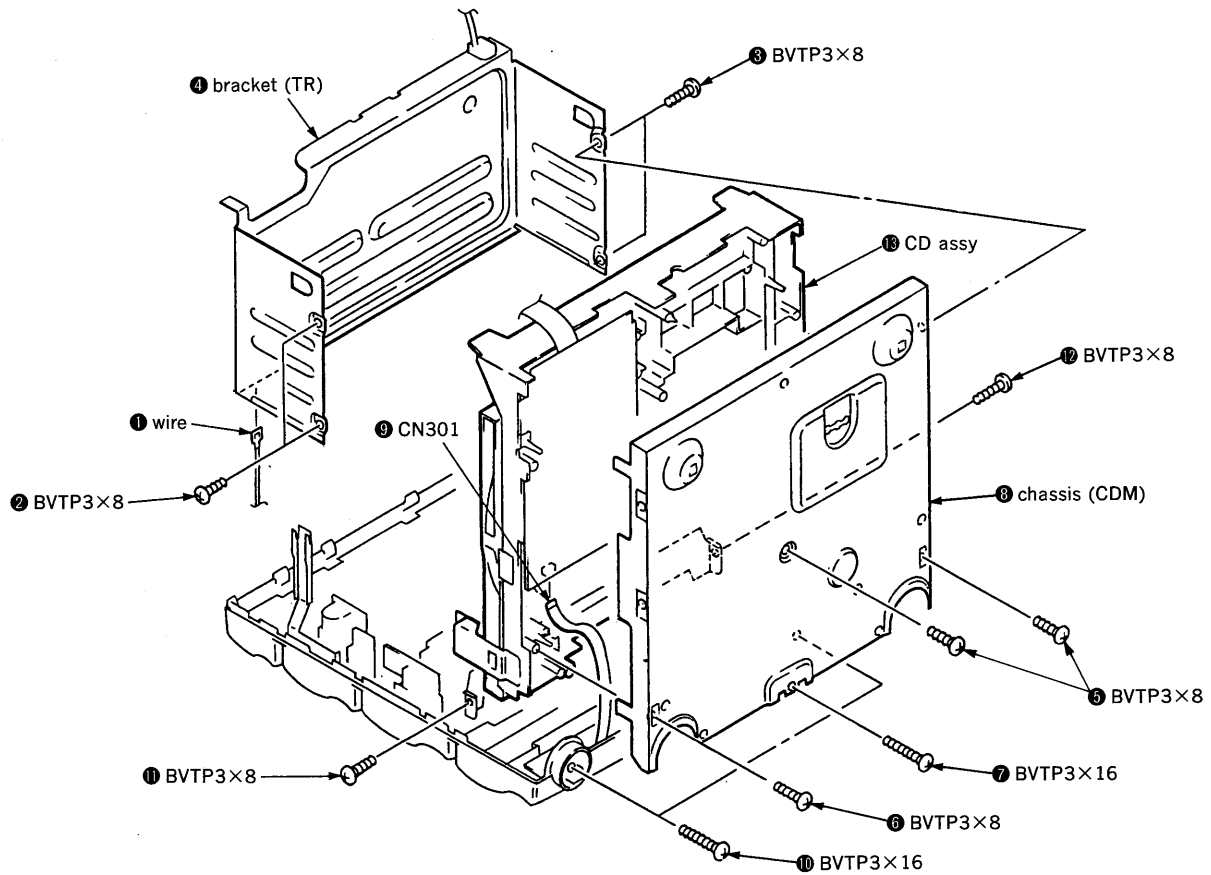
2-3. MAIN BOARD



2-4. POWER TRANSFORMER

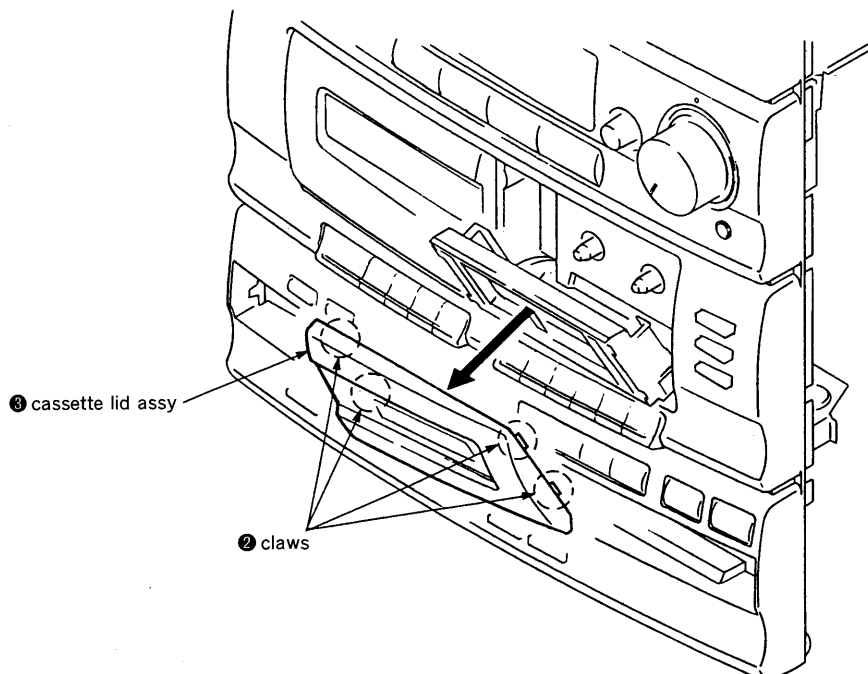


2-5. CD ASSY



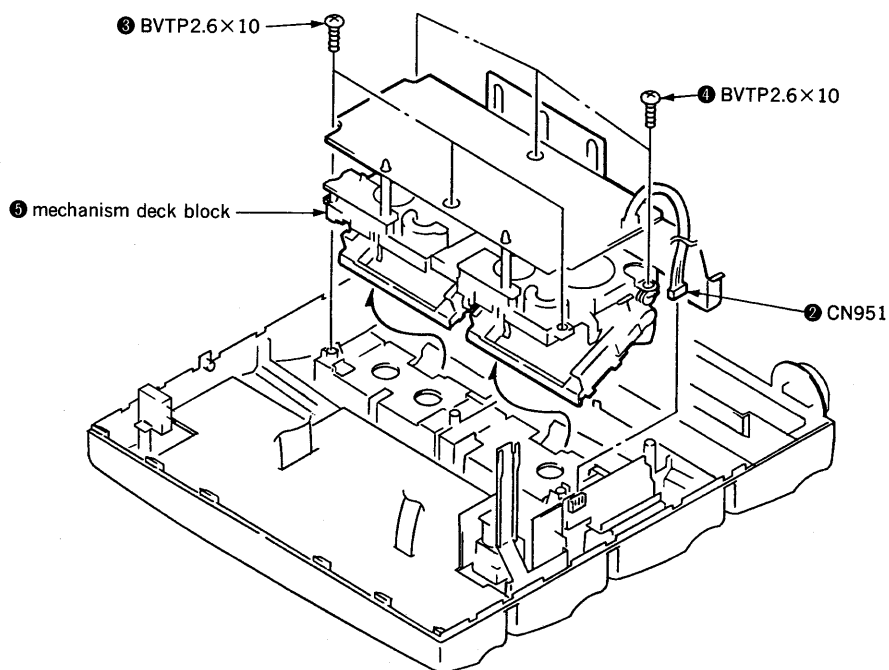
2-6. CASSETTE LID ASSY

- ① Push the EJECT button.

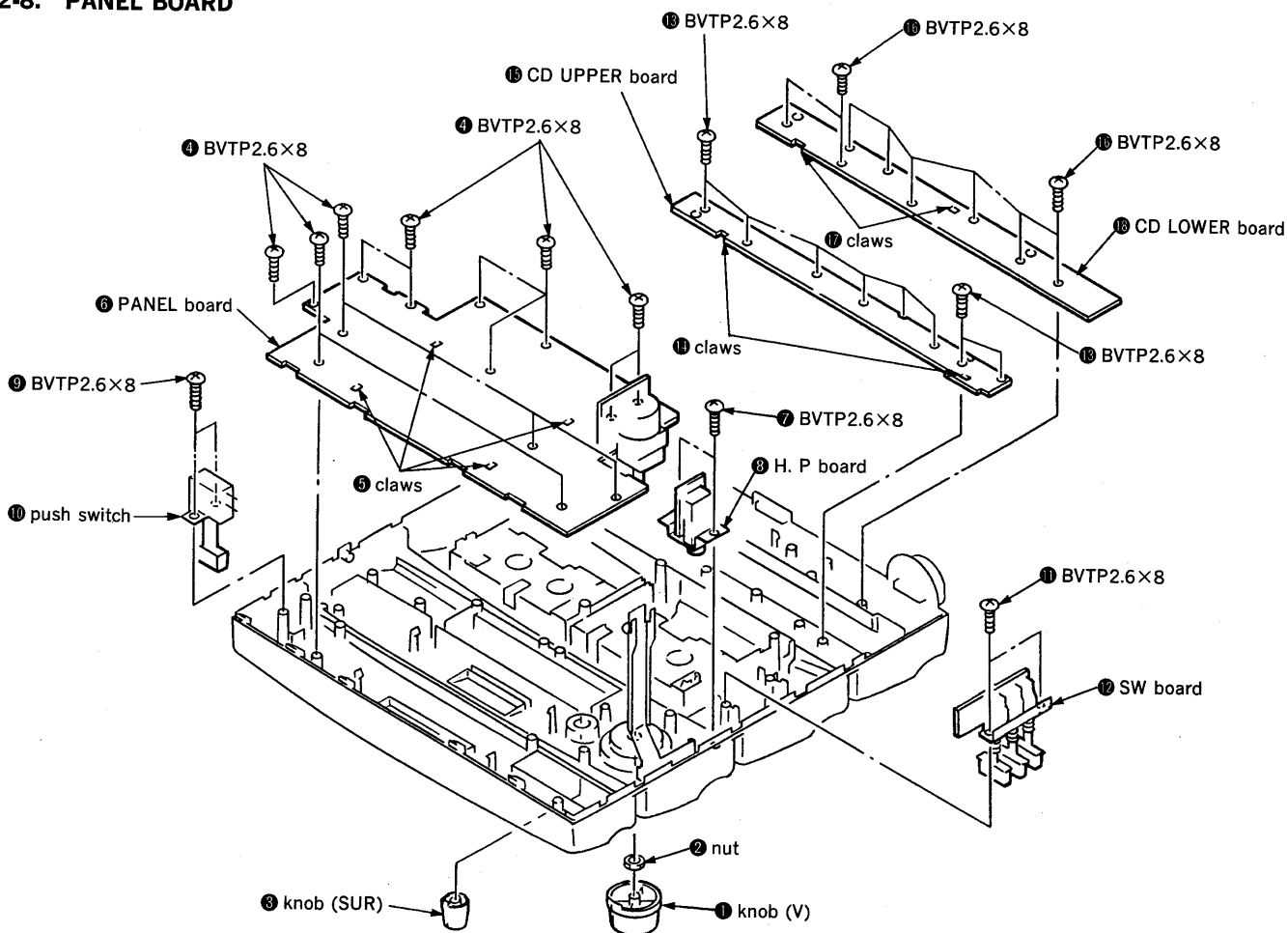


2-7. MECHANISM DECK BLOCK

- ① Push the EJECT button.

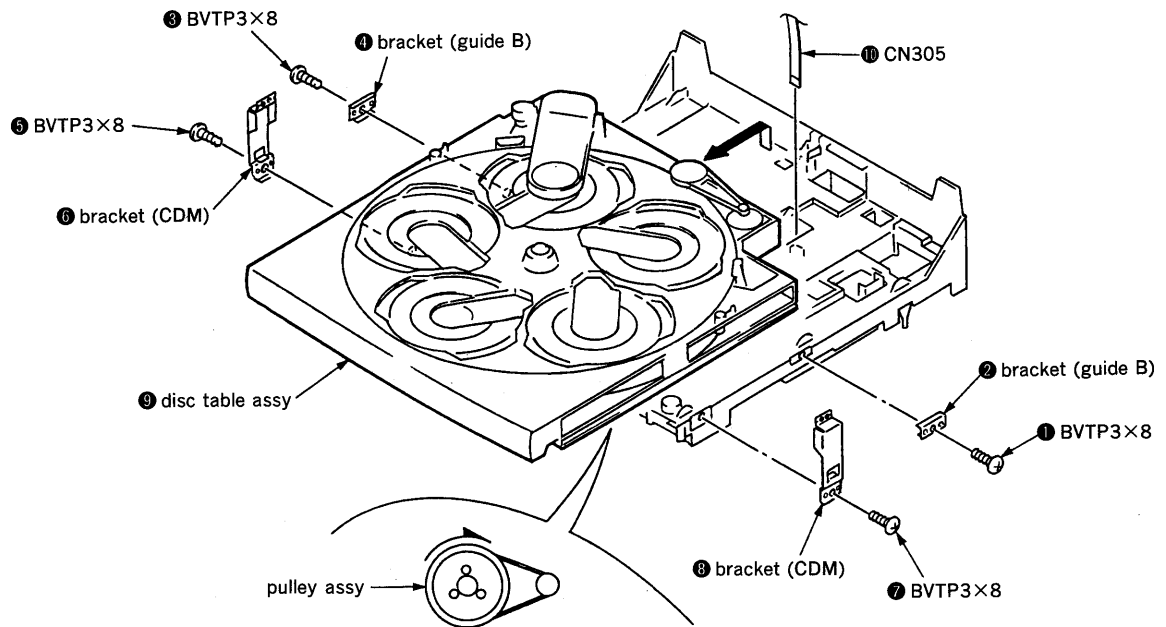


2-8. PANEL BOARD



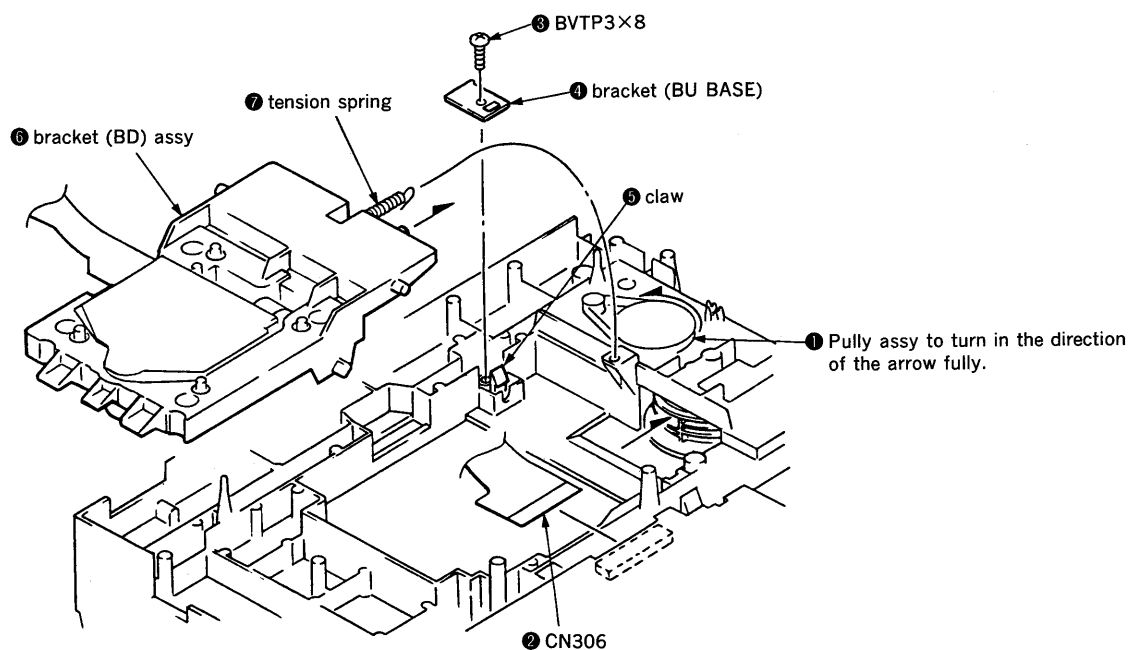
2-9. DISC TABLE ASSY

Note on assembly : Turn the pulley assy in the direction of the arrow.
Down the bracket (BD) assy, and assembly the disc table assy.



2-10. BRACKET (BD) ASSY

Note on assembly : Set to the arrow portion of gear (loading A) for shaft (CAM).



SECTION 3 MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured alcohol-moistened swab :

record/playback heads	pinch rollers
erase head	rubber belts
capstan	idlers
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Torque	Torque meter	Meter reading
FWD	CQ-102C	30–70g•cm (0.42–0.97oz•inch)
FWD Back tension	CQ-102C	1.5–5.5g•cm (0.020–0.076oz•inch)
FF/REW	CQ-201B	63g•cm or more (0.87oz•inch or more)

SECTION 4 ELECTRICAL ADJUSTMENTS

DECK SECTION **0dB=0.775V**

1. Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjusted.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
6. The adjustments should be performed for both L-CH and R-CH.

- Switches and controls should be set as follows unless otherwise specified.

TAPE SELECT switch : TYPE I

DOLBY NR switch : OFF

Type	Signal	Used for
P-4-A100	10kHz, -10dB	Azimuth Adjustment
WS-48B	3kHz, 0dB	Tape Speed Adjustment
P-4-L300	315Hz, 0dB	Level Adjustment

Record/Playback Head Azimuth Adjustment

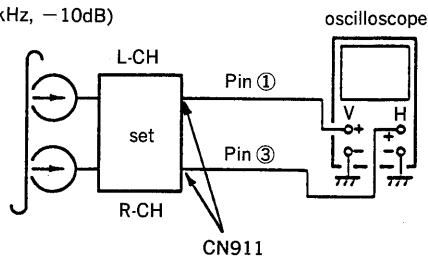
DECK A **DECK B**

Note : Perform this adjustments for both decks.

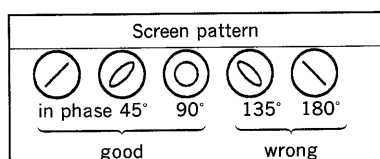
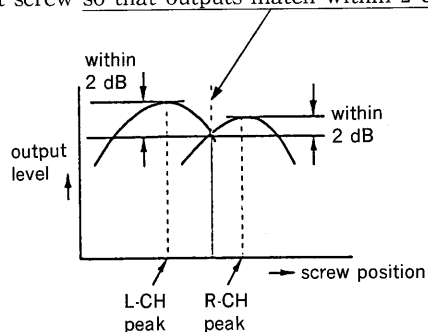
Procedure :

1. Mode : Playback

test tape
P-4-A100
(10kHz, -10dB)

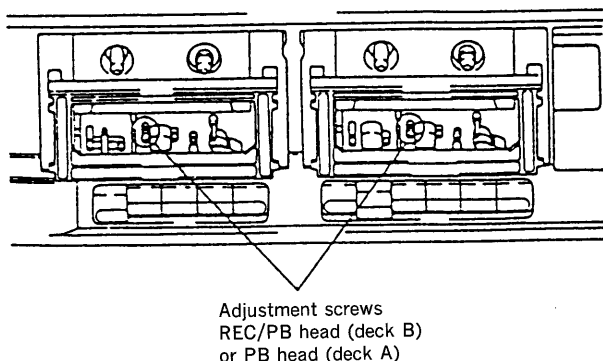


- Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 2 dB of peak.



- After the adjustments, apply suitable locking compound to the parts adjusted.

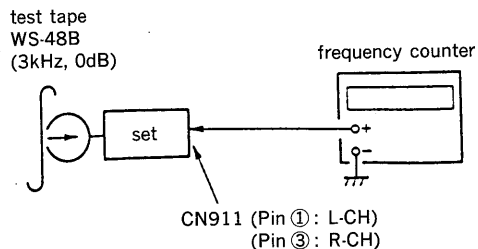
Adjustment Location :



Tape Speed Adjustment DECK A DECK B

Procedure :

Mode: Playback



High speed adjustment (Must be first Adjustment deck B)

- Short pin CN912 on set "DUBBING SPEED" switch to "HIGH". Then at HIGH speed mode.
- Adjust RV901 so that the frequency counter reads $6,000 \pm 20$ Hz.

Normal speed adjustment

- Remove the short pin from CN912 on set "DUBBING SPEED" switch to "NORMAL". Then at NORMAL speed mode.
- Adjust RV902 so that the frequency counter reads $3,000 \pm 10$ Hz.

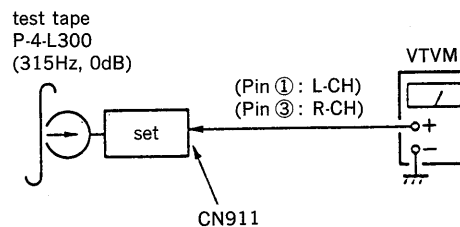
Frequency difference between deck A and deck B the beginning of the tape should be within $\pm 1\%$.

Adjustment Location : main TC board

Playback Level Adjustment DECK A DECK B

Procedure :

Mode: Playback



Deck A side RV701 (L-CH), RV801 (R-CH)

Deck B side RV702 (L-CH), RV802 (R-CH)

so that the limits below are satisfied.

Adjustable limits :

CN911 PB level: 366.7 to 411.4mV (-6.5 to -5.5 dB)

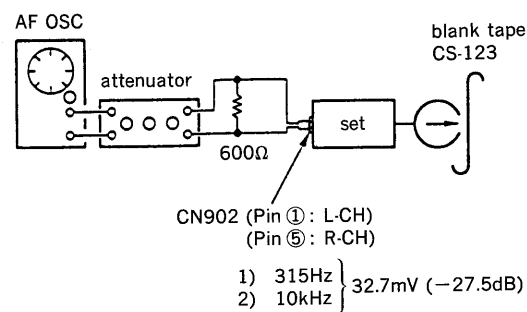
level difference between the channels: within ± 1 dB

Adjustment Location : main TC board

Record Bias Current Adjustment DECK B

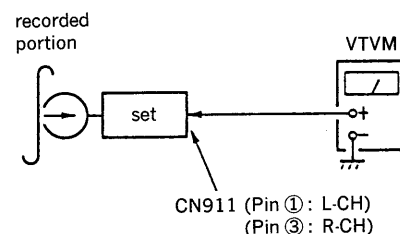
Procedure :

- Mode: record



- 1) 315Hz } 32.7mV (-27.5 dB)
- 2) 10kHz }

- Mode: Playback



Confirm playback the signal recorded in step 1 become adjustable limits as follows.

If these levels do not adjustable limits, adjustment the RV704 (L-CH) and RV804 (R-CH) to repeat steps 1 and 2.

Adjustable limits : Playback output of 315Hz to playback output of 10kHz: $0 \pm 0.5\text{dB}$

Adjustment Location : main TC board

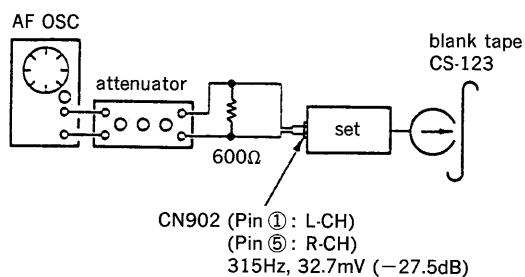
Record Level Adjustment **DECK B**

Setting :

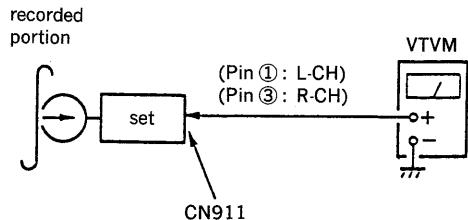
TAPE SELECT switch : TYPE I

Procedure :

1. Mode : record



2. Mode : playback



Confirm playback the signal recorded in step 1 become adjustable limits as follows.

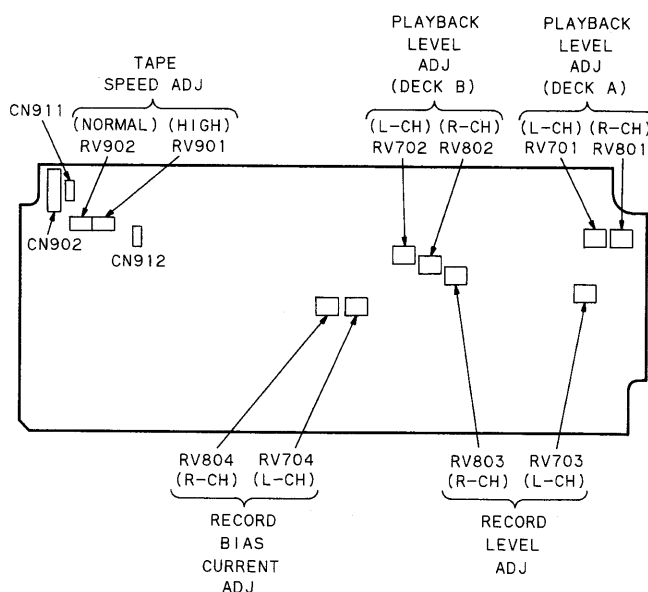
If these levels do not adjustable limits, adjustment the RV703 (L-CH) and RV803 (R-CH) to repeat steps 1 and 2.

Adjustable limits :

CN911 PB level: 30.9 to 34.6mV (-28 to -27dB)

Adjustment Location : main TC board

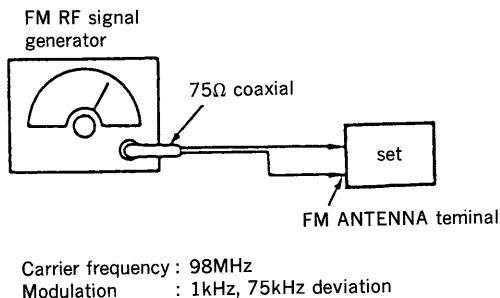
Adjustment Location : main TC board (component side)



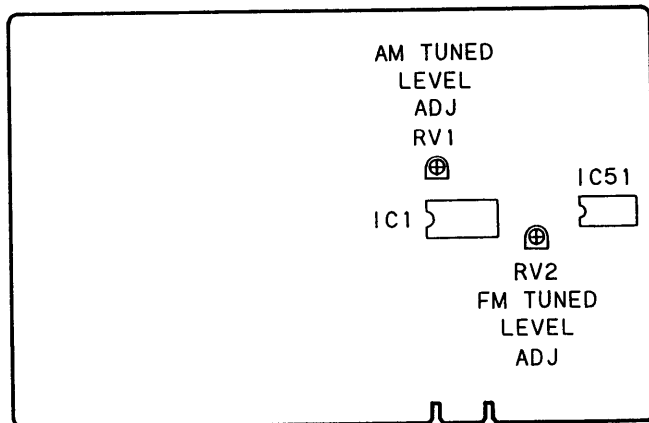
TUNER SECTION **0dB=1 μ V**

• **FM SECTION**

Setting :



Adjustment Location : main board (component side)



FM Tuned Level Adjustment

Band : FM

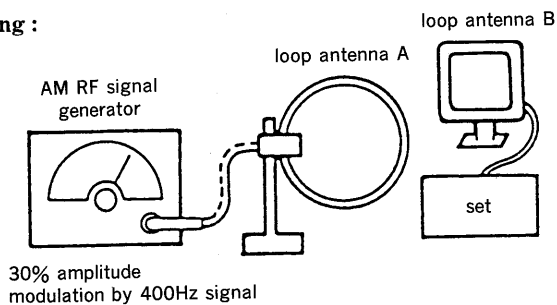
Procedure :

1. Supply a 17.8 μ V (25dB μ) 98MHz signal from the ANTENNA terminal.
2. Tune the set to 98MHz.
3. Adjust RV2 so that the TUNED indicator goes on.

Adjustment Location : main board

• **AM SECTION**

Setting :



AM TUNED Level Adjustment

Band : AM

Procedure :

1. Set loop antenna A so that the loop antenna B input level becomes 0.32mV (50dB μ).
2. Tune the set to 1,050kHz.
3. Adjust RV1 so that the TUNED indicator goes on.

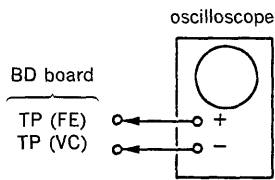
Adjustment Location : main board

CD SECTION

Note :

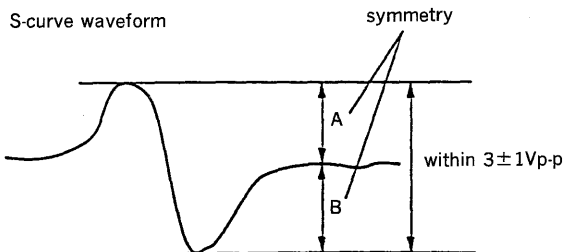
1. CD Block basically constructed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use the oscilloscope with more than $10M\Omega$ impedance.
4. Clean an objective lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

S-Curve Check



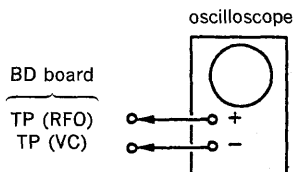
Procedure :

1. Connect oscilloscope to test point TP (FE) on BD board.
2. Connect between test point TP (FEI) and TP (VC) by lead wire.
3. Turned Power switch on.
4. Put disc (YEDS-18) in and turned Power switch on again and actuate the focus search. (Actuate the focus search when disc table is moving in and out.)
5. Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within $3\pm 1V_{p-p}$.



6. After check, remove the lead wire connected in step 2.
- Note :**
- Try to measure several times to make sure that the ratio of A : B or B : A is more than 10 : 7.
 - Take sweep time as long as possible and light up the brightness to obtain best waveform.

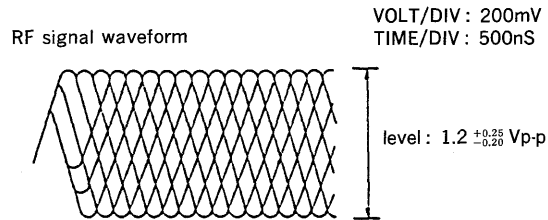
RF Level Check



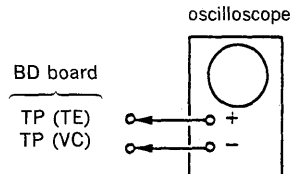
Procedure :

1. Connect oscilloscope to test point TP (RFO) on BD board.
2. Turned Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note : Clear RF signal waveform means that the shape "◇" can be clearly distinguished at the center of the waveform.

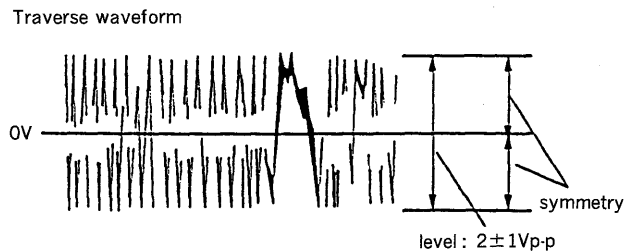


E-F Balance Check



Procedure :

1. Connect test point TP (ADJ) to ground and TP (TEI) to TP (VC) with lead wire.
2. Connect oscilloscope to test point TP (TE) on BD board.
3. Turned Power switch on.
4. Put disc (YEDS-18) is and playback.
5. Confirm that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0V, and check this level.

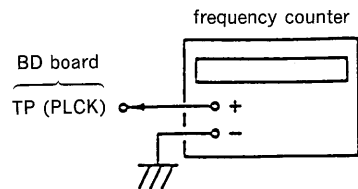


6. Remove the lead wire connected in step 1.

RF PLL Free-run Frequency Check

Procedure :

1. Connect frequency counter to test point (PLCK) with lead wire.

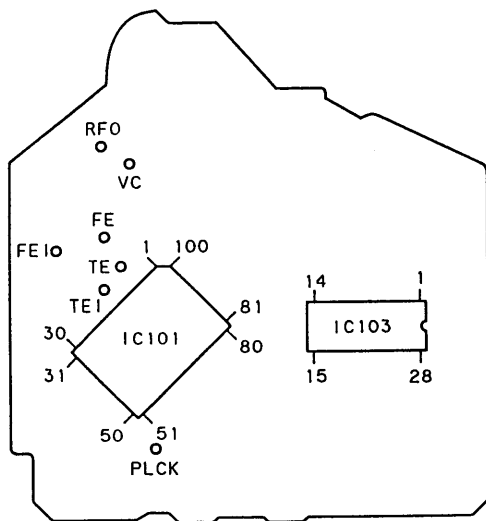


2. Turned Power switch on.
3. Confirm that reading on frequency counter is 4.3218MHz.

Adjustment Location :

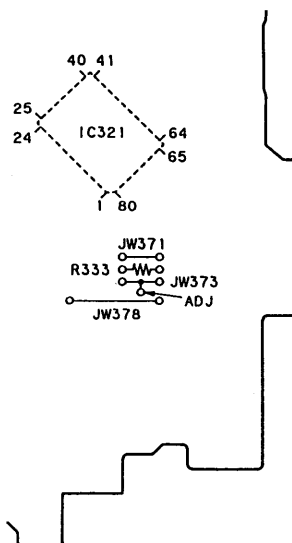
[BD BOARD]

—Side B—



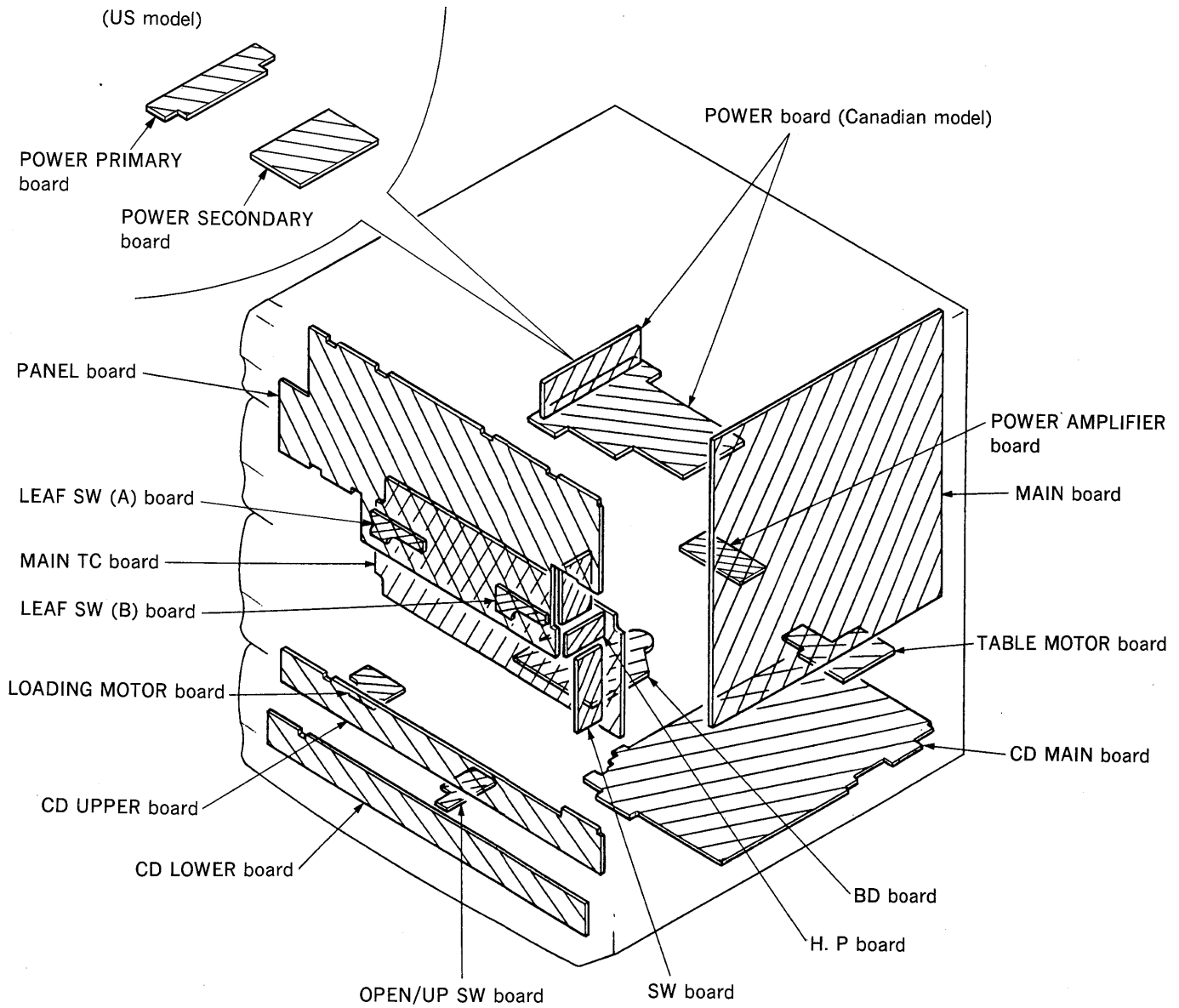
[CD MAIN BOARD]

—Component side—

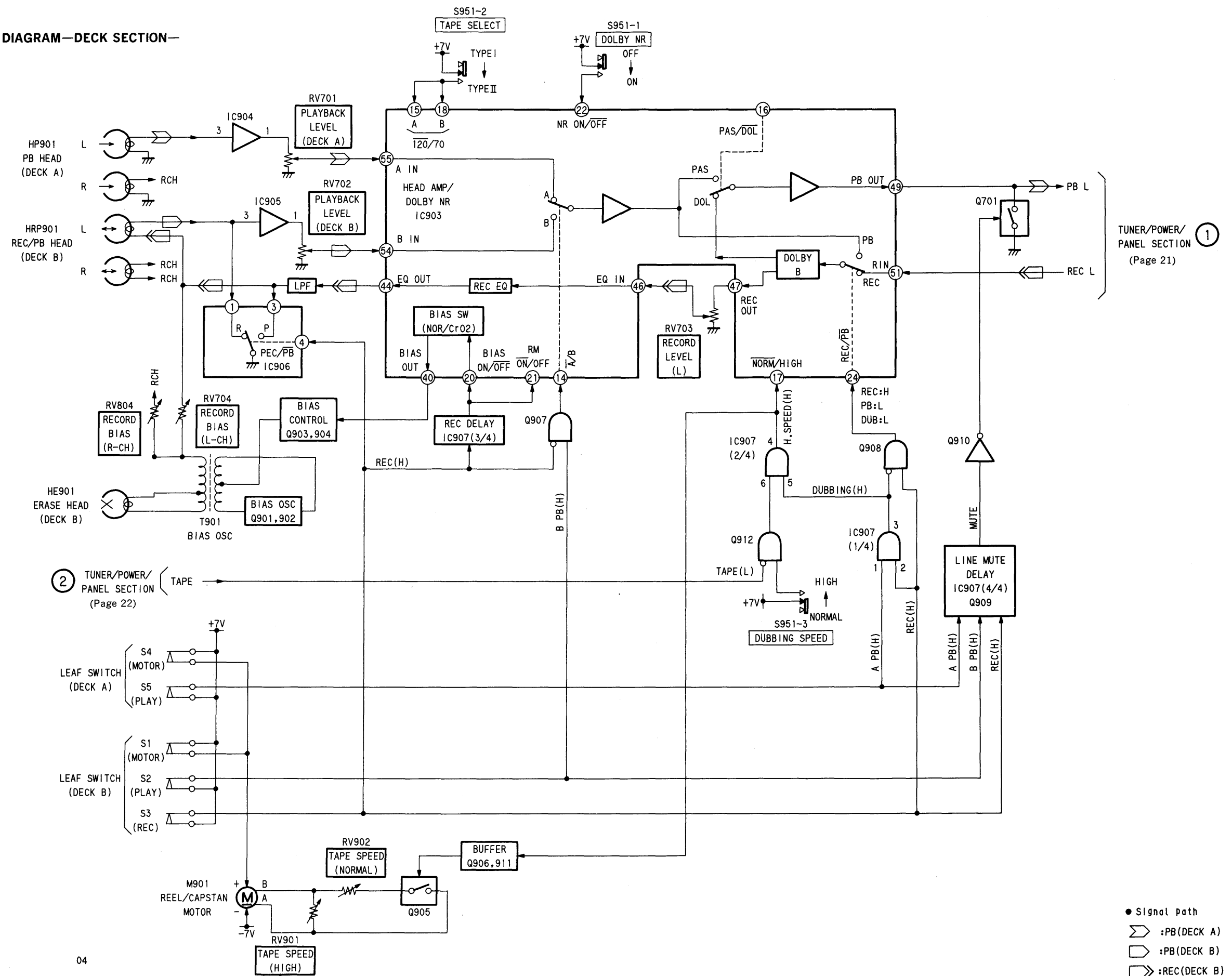


SECTION 5 DIAGRAM

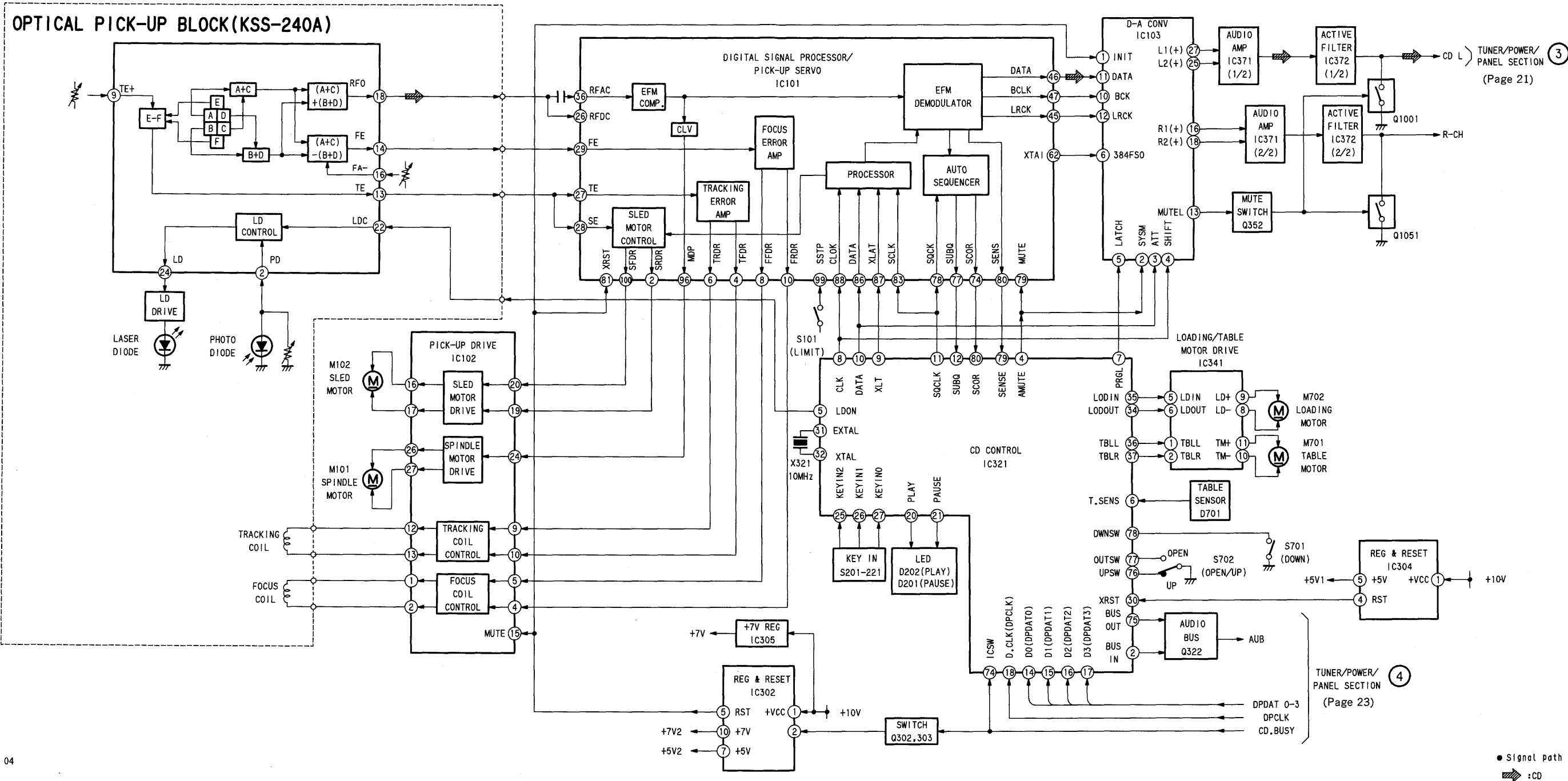
5-1. CIRCUIT BOARDS LOCATION



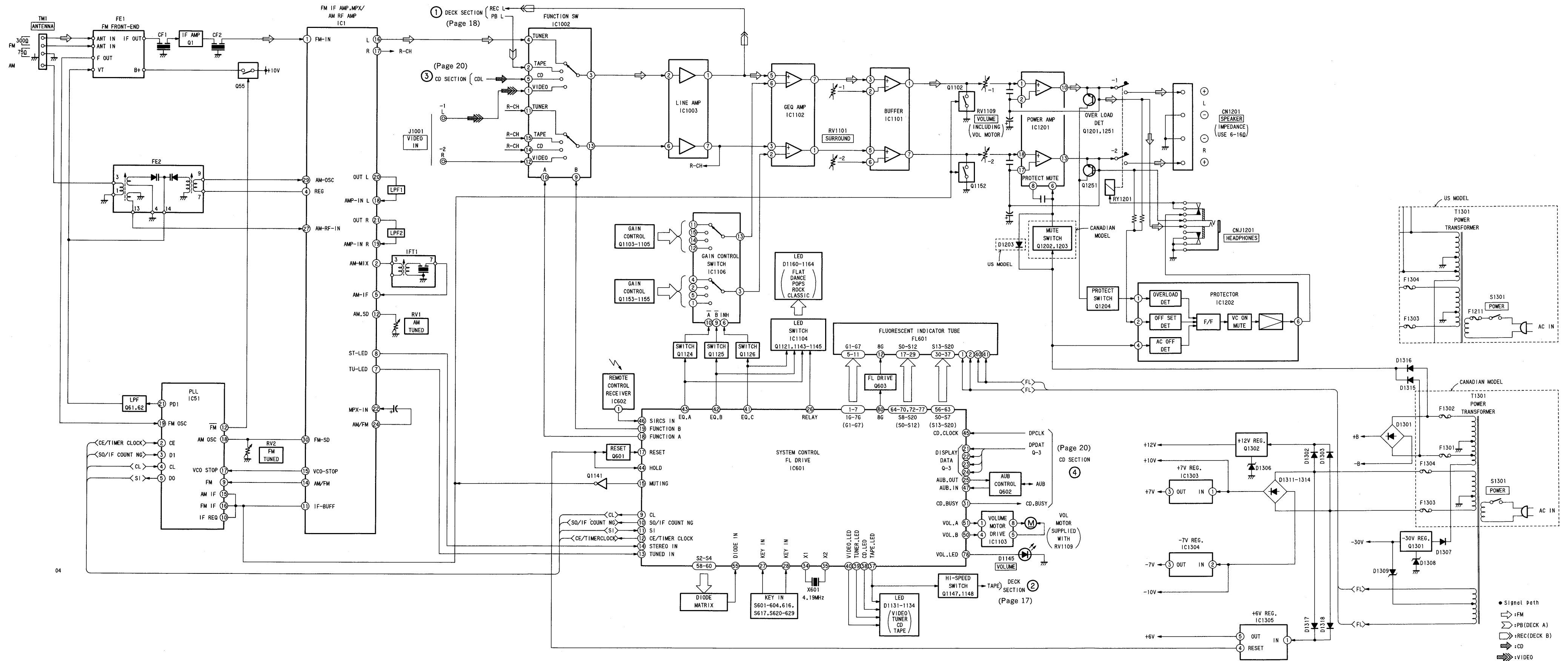
5-2. BLOCK DIAGRAM—DECK SECTION—



5-3. BLOCK DIAGRAM—CD SECTION—



5-4. BLOCK DIAGRAM—TUNER/POWER/PANEL SECTION—



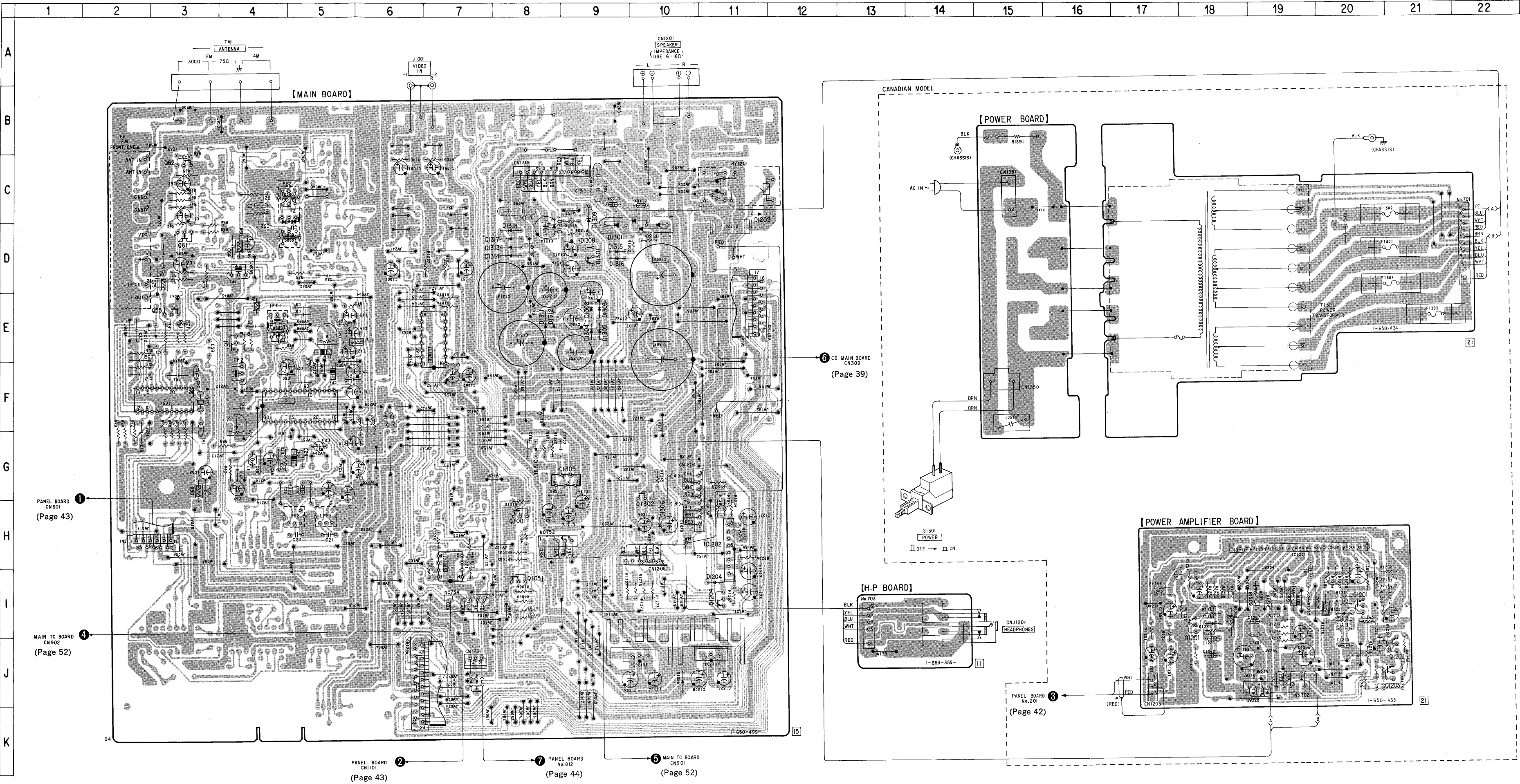
5-5. PRINTED WIRING BOARDS—TUNER/POWER SECTION— • Refer to page 41 for Semiconductor Lead Layouts.

• Semiconductor Location

Ref. No.	Location
D1	E-3
D1201	I-20
D1202	C-11
D1204	I-11
D1251	I-18
D1301	D-9
D1302	E-9
D1303	E-9
D1304	E-9
D1305	E-9
D1306	H-10
D1307	D-8
D1308	D-9
D1309	C-9
D1310	G-8
D1311	E-8
D1312	E-8
D1313	D-8
D1314	D-8
D1315	D-9
D1316	D-9
D1317	D-8
D1318	D-8
D1385	J-10
IC1	F-4
IC51	F-3
IC1002	E-7
IC1003	H-7
IC1201	H-19
IC1202	H-11
IC1303	J-9
IC1304	J-10
IC1305	G-9
Q1	E-4
Q55	E-3
Q61	D-3
Q62	C-3
Q1001	H-8
Q1051	I-8
Q1201	I-20
Q1202	J-21
Q1203	J-21
Q1204	I-11
Q1251	I-18
Q1301	D-9
Q1302	G-10

Note:

- — : parts extracted from the component side.
- — indicates side identified with part number.
- : Pattern on the side which is seen.



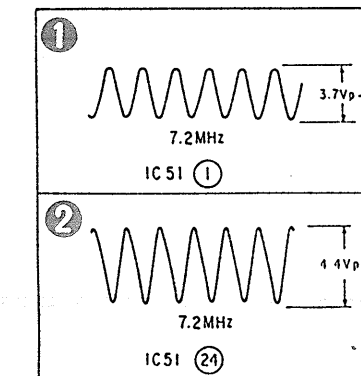
- Note:
- All capacitors are in μF unless otherwise noted. pF : μF 50WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $1/4\text{ W}$ or less unless otherwise specified.
 - Δ : internal component.

Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

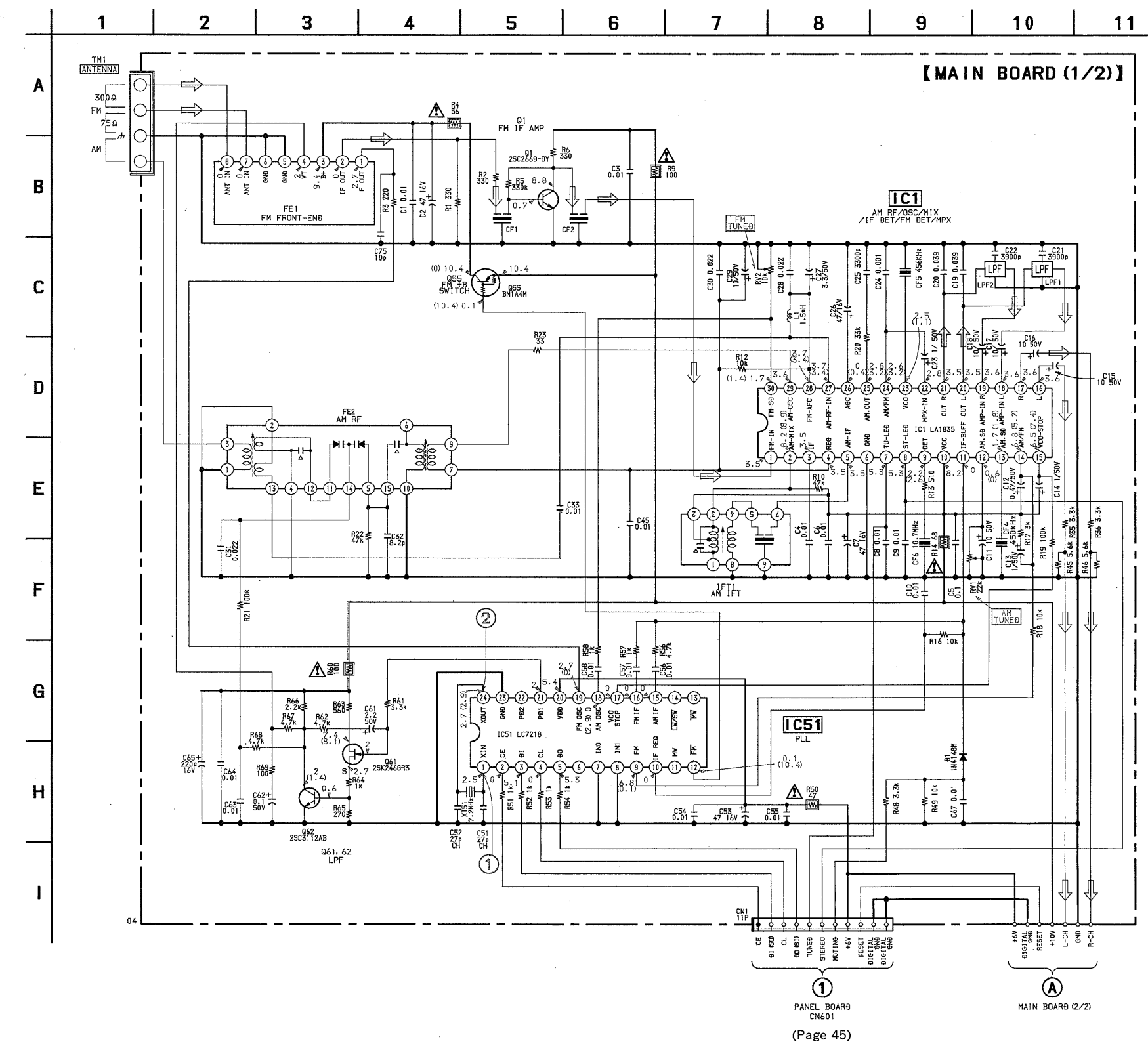
Note: Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- \square : nonflammable resistor.
- \square : B+ Line
- \square : B- Line
- \square : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM
- Voltages are taken with a VOM (Input Impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path:
 - FM
 - PB (DECK A)
 - CD
 - VIDEO

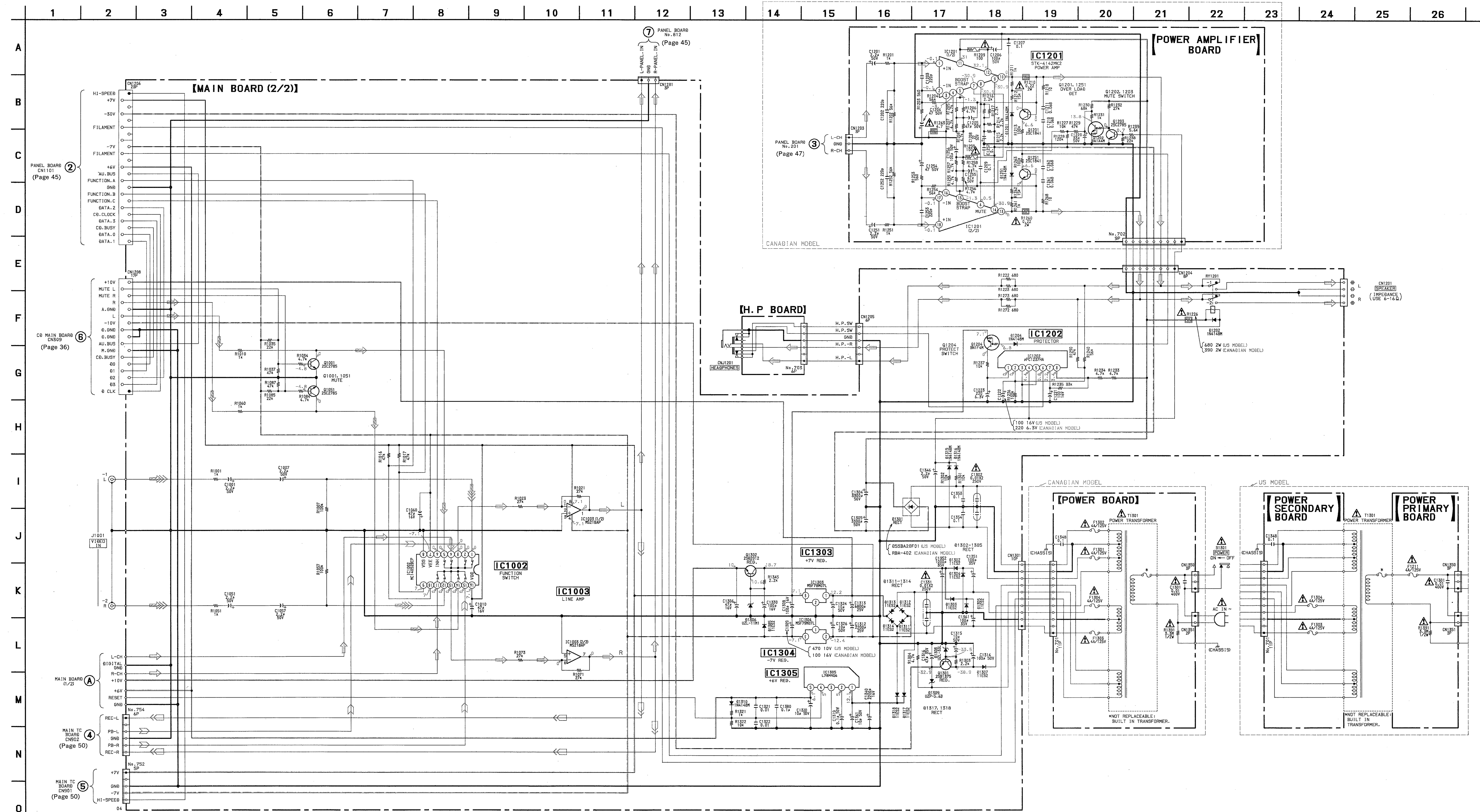
• Waveforms



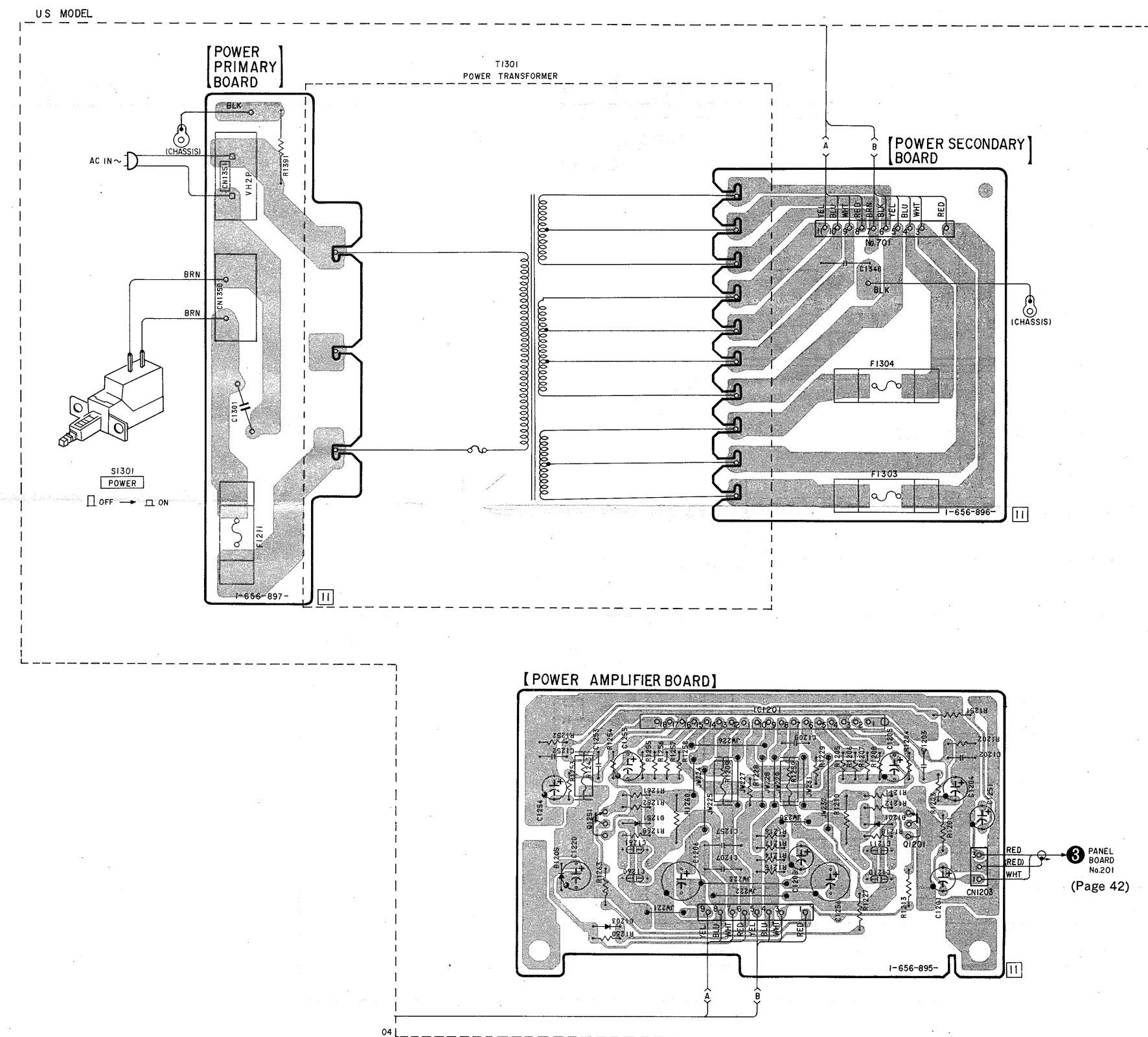
5-6. SCHEMATIC DIAGRAM—TUNER SECTION— • Refer to page 53 for IC Block Diagrams.



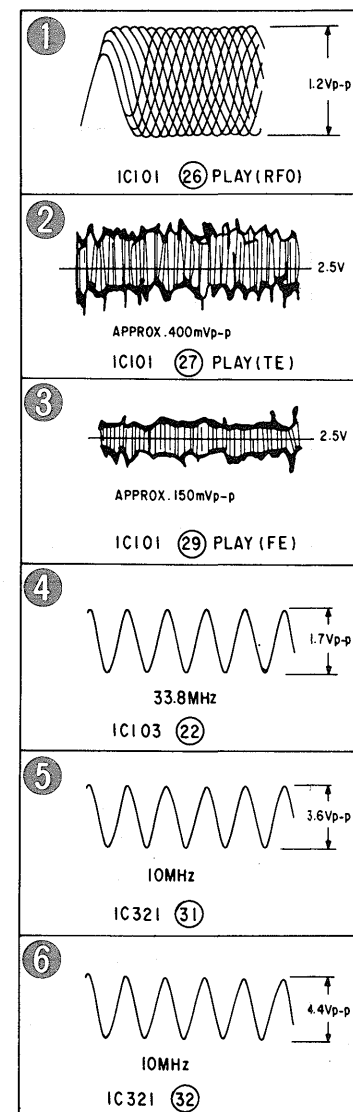
5-7. SCHEMATIC DIAGRAM—POWER SECTION— • Refer to page 53 for IC Block Diagrams.



• PRINTED WIRING BOARDS—POWER SECTION—(US MODEL) (Refer to page 26 for PRINTED WIRING BOARDS.)



• Waveforms



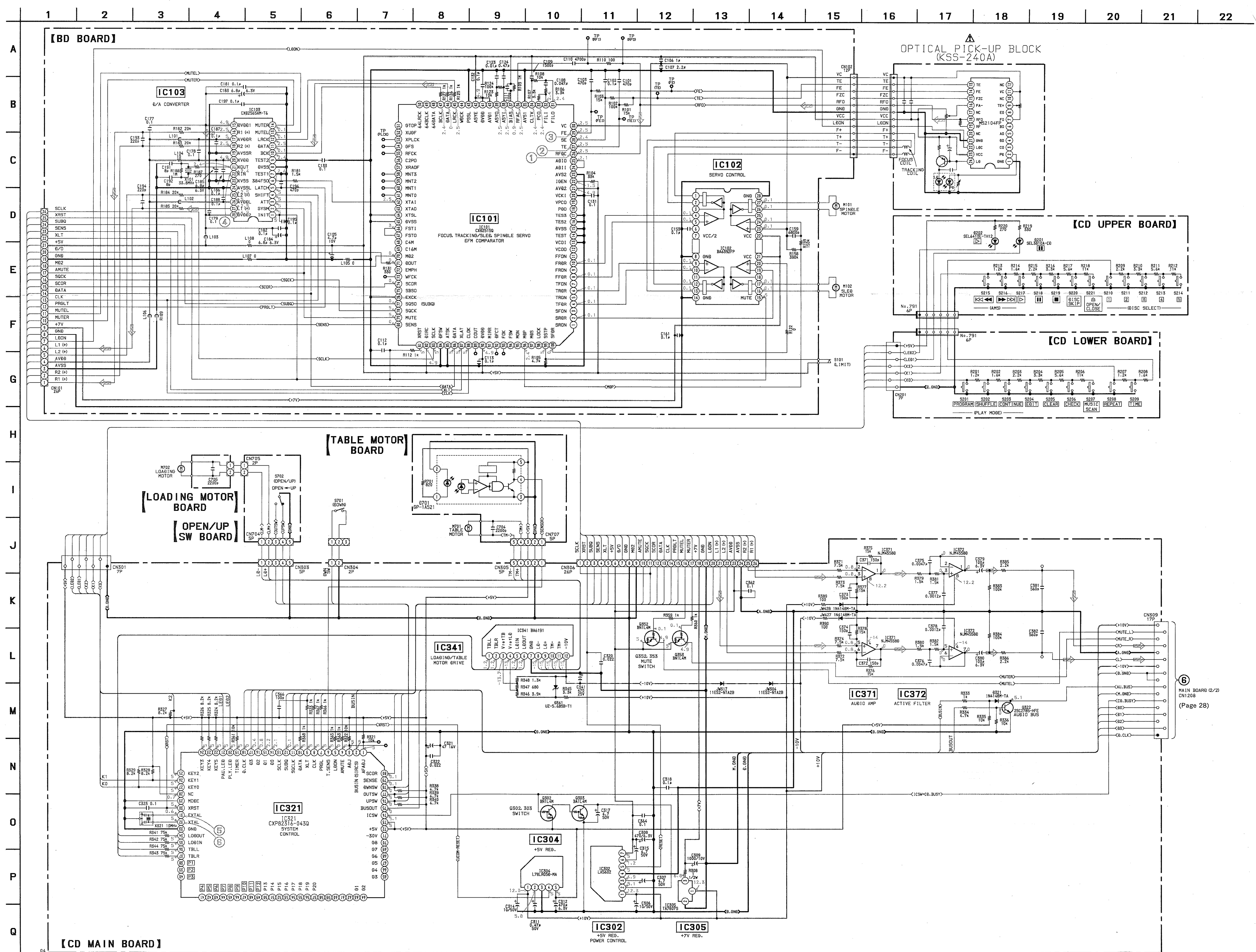
- Note:**
- All capacitors are in μF unless otherwise noted. pF: μF 50WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and 1/4 W or less unless otherwise specified.
 - Δ : internal component.

Note:
The components identified by a mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

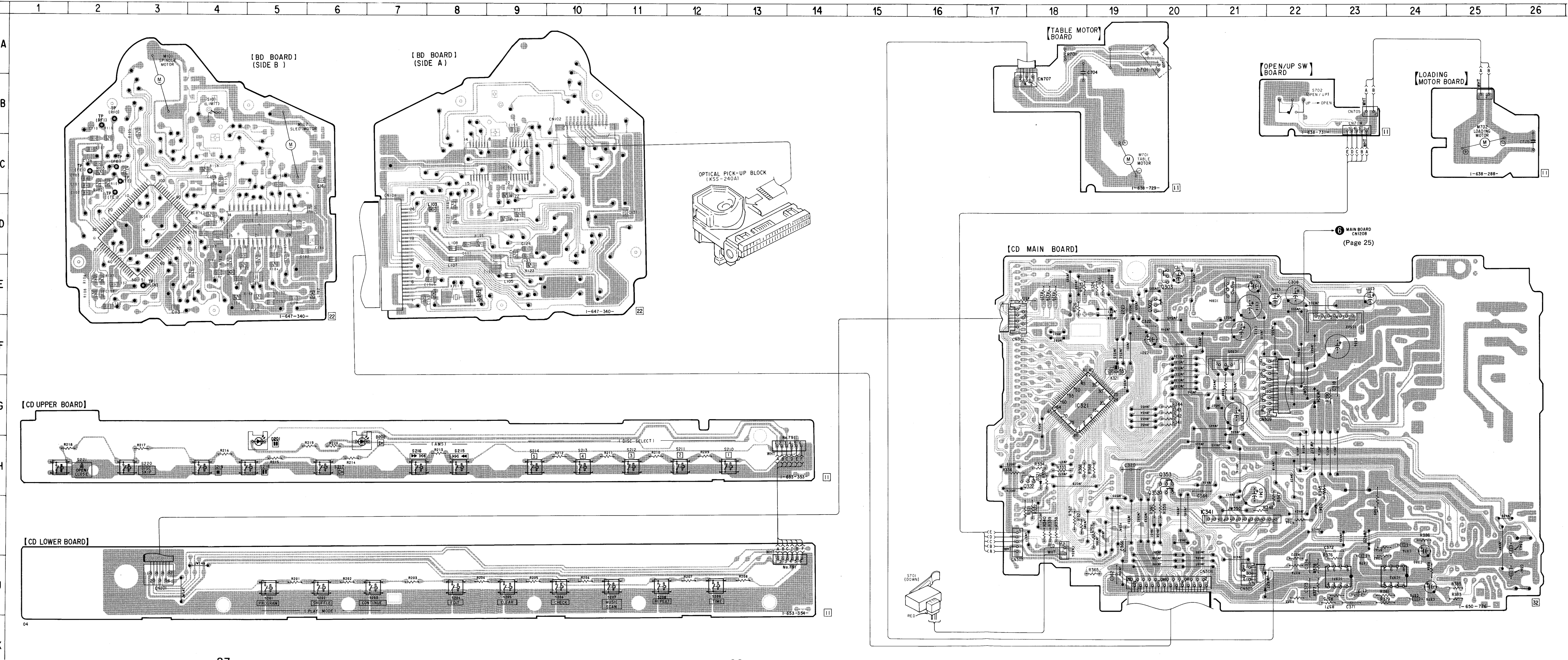
Note:
Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- : B+ Line
- : B- Line
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- no mark: CD STOP
- Voltages are taken with a VOM (Input Impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
- \Rightarrow : CD

5-8. SCHEMATIC DIAGRAM—CD SECTION— • Refer to page 53 for IC Block Diagrams.



5-9. PRINTED WIRING BOARDS—CD SECTION— • Refer to page 41 for Semiconductor Lead Layouts.



• Semiconductor Location

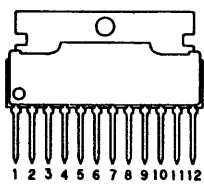
Ref. No.	Location
D201	H-4
D202	H-6
D321	H-18
D341	I-22
D701	A-19
IC101	D-3
IC102	C-8
IC103	D-4
IC302	E-23
IC304	E-21
IC305	F-21
IC321	G-18
IC341	I-21
IC371	J-22
IC372	J-23
JW304	G-22
JW317	H-22
JW427	J-21
JW428	I-23
Q302	E-20
Q303	E-20
Q322	H-17
Q352	H-20
Q353	H-20

Note:

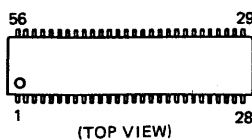
- : parts extracted from the component side.
- : Through hole.
- : Pattern on the side which is seen. (The other layer's patterns are not indicated.)

5-10. SEMICONDUCTOR LEAD LAYOUTS

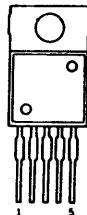
BA6191



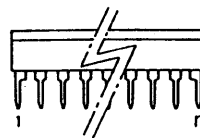
HA12172NT



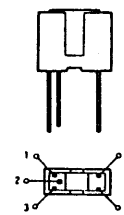
L78MR06



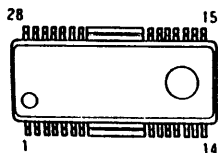
μ PC1330HA



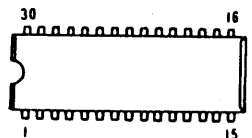
GP1A521



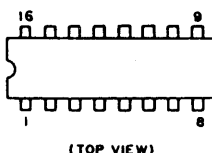
BA6392FP



LA1835



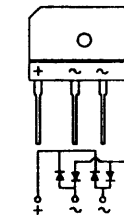
MC14052BCP



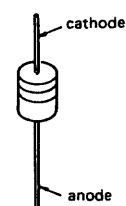
DTA124ES
DTA144ES
DTC114ES
DTC124ES
DTC144ES
2SC1841-PAFAEA
2SC2669-OY
2SC3622A-LK



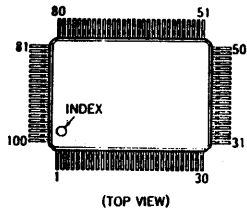
RBA-402



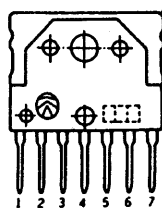
UZ-5.6BSB
UZL-11M1-TA
11ES2
11ES2-NTA2B



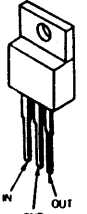
CXD2515Q



LA5602



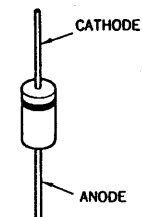
M5F78M07L
M5F79M07L
TA7807S



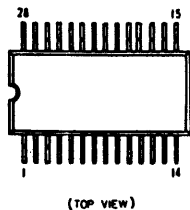
UN4111
2SA1175-HFE
2SC2785-HFE
LETTER SIDE



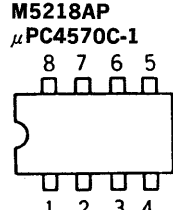
UZL-33L
UZP-5.6B
1N4148M



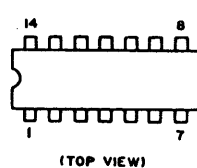
CXD2565AM-T6



LB1639



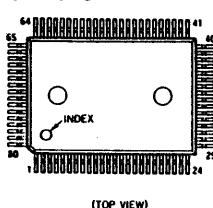
SN74HC00AN
TC4081BP



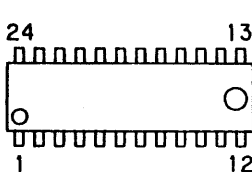
2SB1094-LK
2SD2012



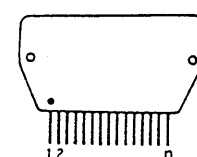
CXP82316-043Q
 μ PD78042AGF
-022-3B9



LC7218-ST



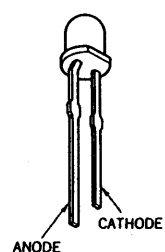
STK-4142MK2



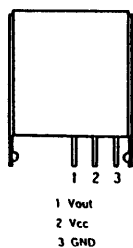
2SC3112-B
2SC945-P



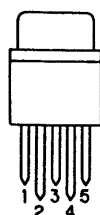
SEL3810A-CD
SEL5220S-TH8C
SEL6210S-TH12
SEL6410E-TH12



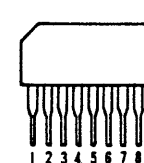
GP1U52XB



L78LR05D-MA



μ PC1237HA



2SK246-GR3

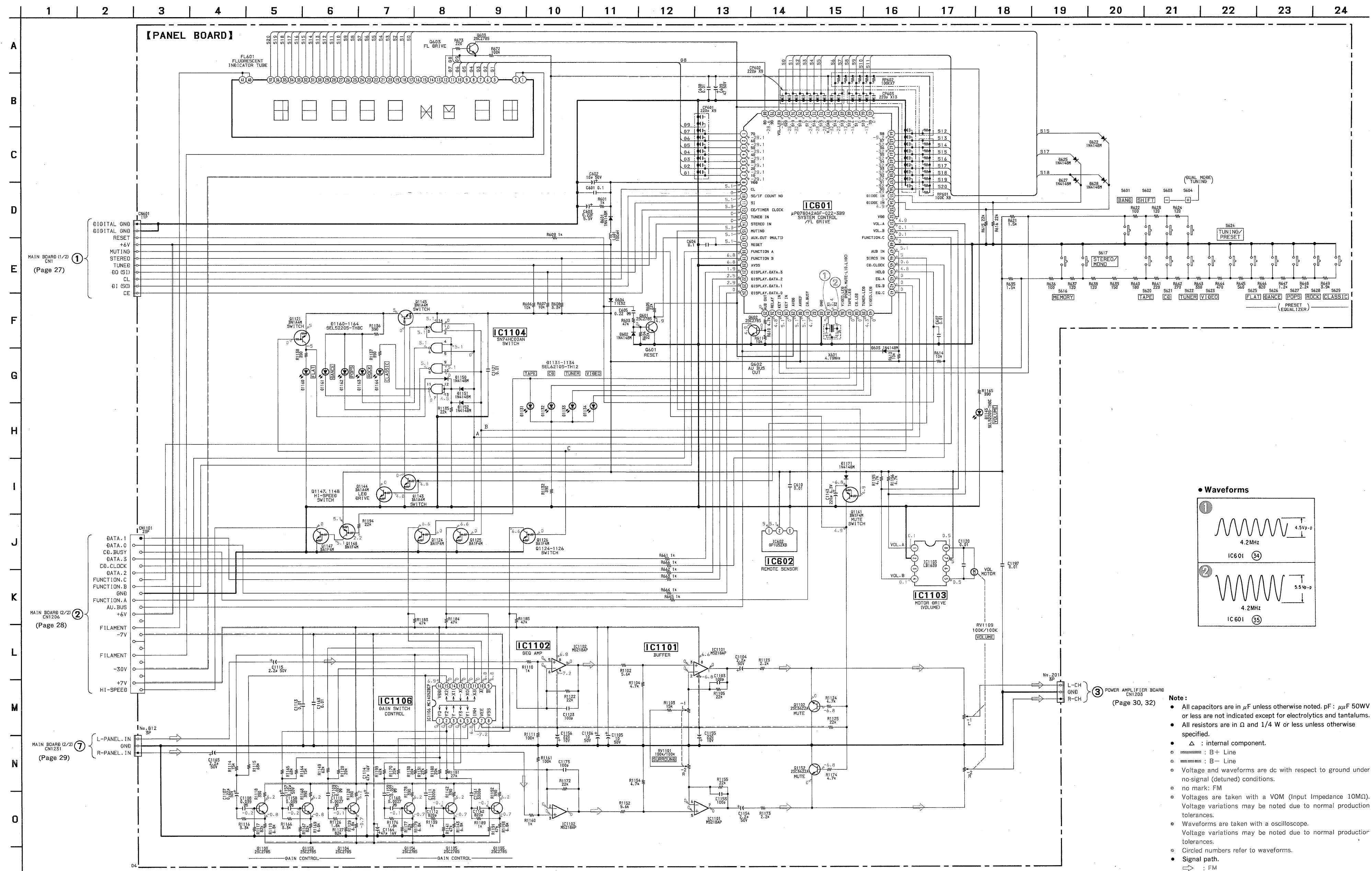


Ref. No.	Location
D601	A-4
D602	B-6
D603	C-8
D604	C-5
D622	B-9
D625	B-8
D627	B-8
D628	B-8
D1131	E-9
D1132	E-8
D1133	E-7
D1134	E-5
D1145	D-2
D1150	F-6
D1151	F-6
D1152	F-6
D1160	E-14
D1161	E-13
D1162	E-13
D1163	E-12
D1164	E-11
D1171	C-5
IC601	B-7
IC602	B-10
IC1101	F-4
IC1102	D-11
IC1103	E-3
IC1104	F-7
IC1106	C-11
Q601	B-5
Q602	C-6
Q603	B-7
Q1102	F-3
Q1103	D-13
Q1104	D-13
Q1105	D-12
Q1121	F-8
Q1124	B-9
Q1125	B-9
Q1126	B-9
Q1141	C-5
Q1143	F-9
Q1144	F-9
Q1145	F-8
Q1147	F-8
Q1148	F-8
Q1152	G-3
Q1153	A-11
Q1154	A-12
Q1155	B-11

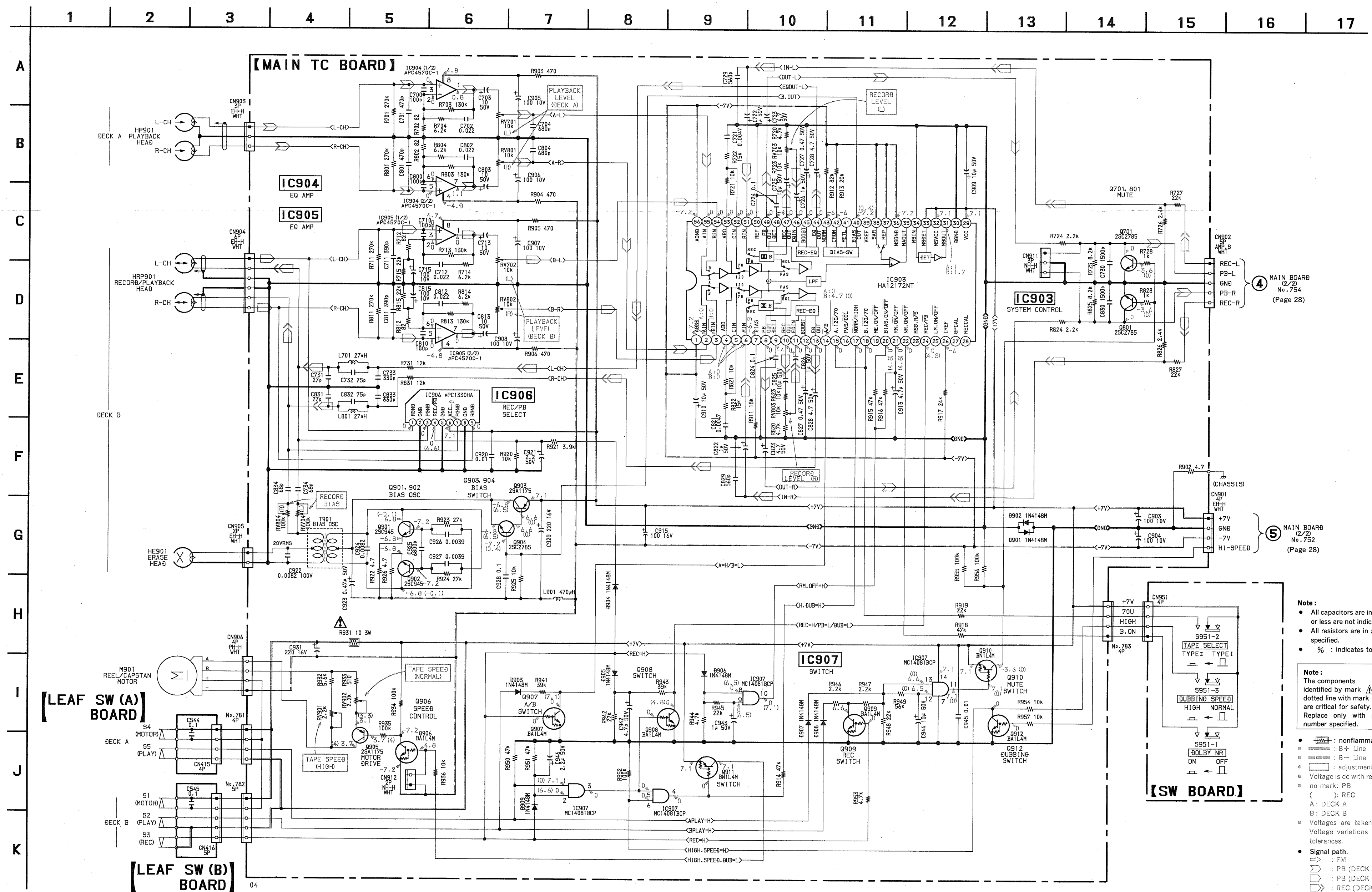
- ○ — : parts extracted from the component side.
- ■ : Pattern on the side which is seen.

MAIN BOARD
CN1231
(Page 25)

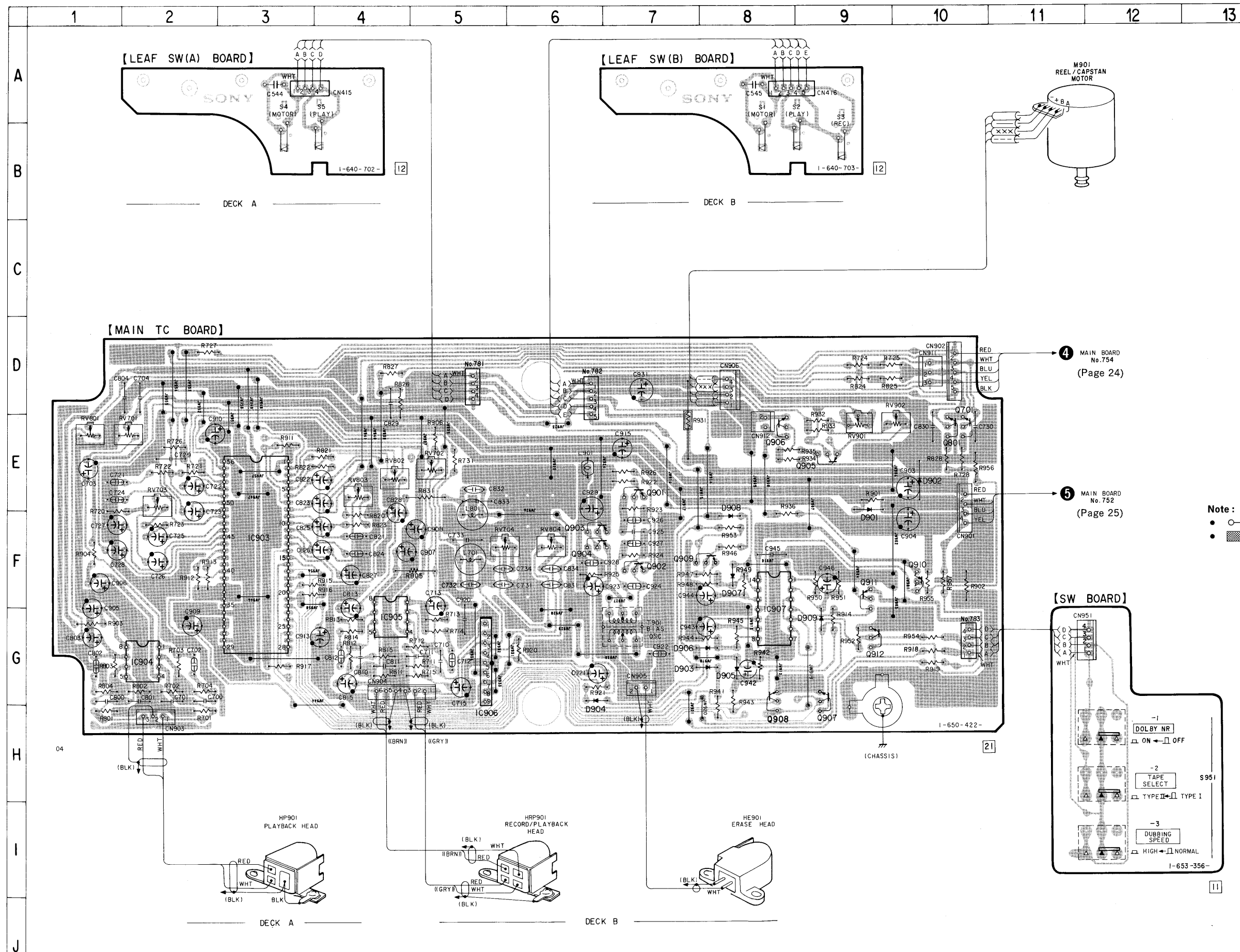
5-12. SCHEMATIC DIAGRAM—PANEL SECTION— • Refer to page 53 for IC Block Diagrams.



5-13. SCHEMATIC DIAGRAM—DECK SECTION— • Refer to page 53 for IC Block Diagrams.



5-14. PRINTED WIRING BOARDS—DECK SECTION— • Refer to page 41 for Semiconductor Lead Layouts.

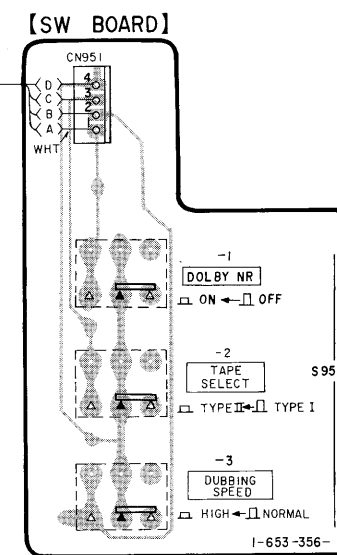


- **Semiconductor Location**

Ref. No.	Location
D901	E-9
D902	E-10
D903	G-7
D904	G-6
D905	G-8
D906	G-7
D907	F-8
D908	E-8
D909	G-9
IC903	F-3
IC904	G-2
IC905	G-4
IC906	G-5
IC907	F-8
Q701	E-10
Q801	E-10
Q901	E-7
Q902	F-7
Q903	F-6
Q904	F-6
Q905	E-9
Q906	E-8
Q907	G-9
Q908	G-8
Q909	F-7
Q910	F-10
Q911	F-9
Q912	G-9

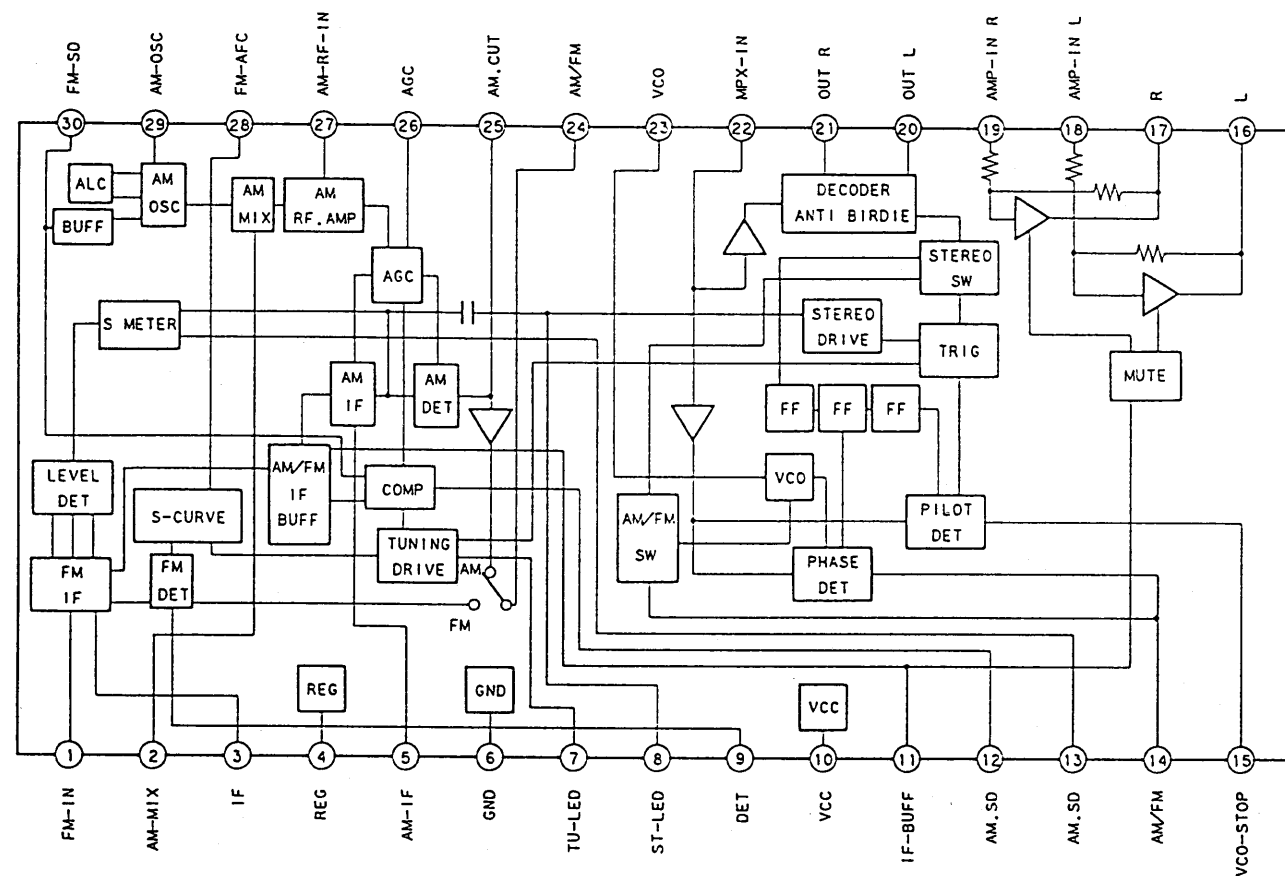
Note :

- ○ — : parts extracted from the component side.
- ■ : Pattern on the side which is seen.

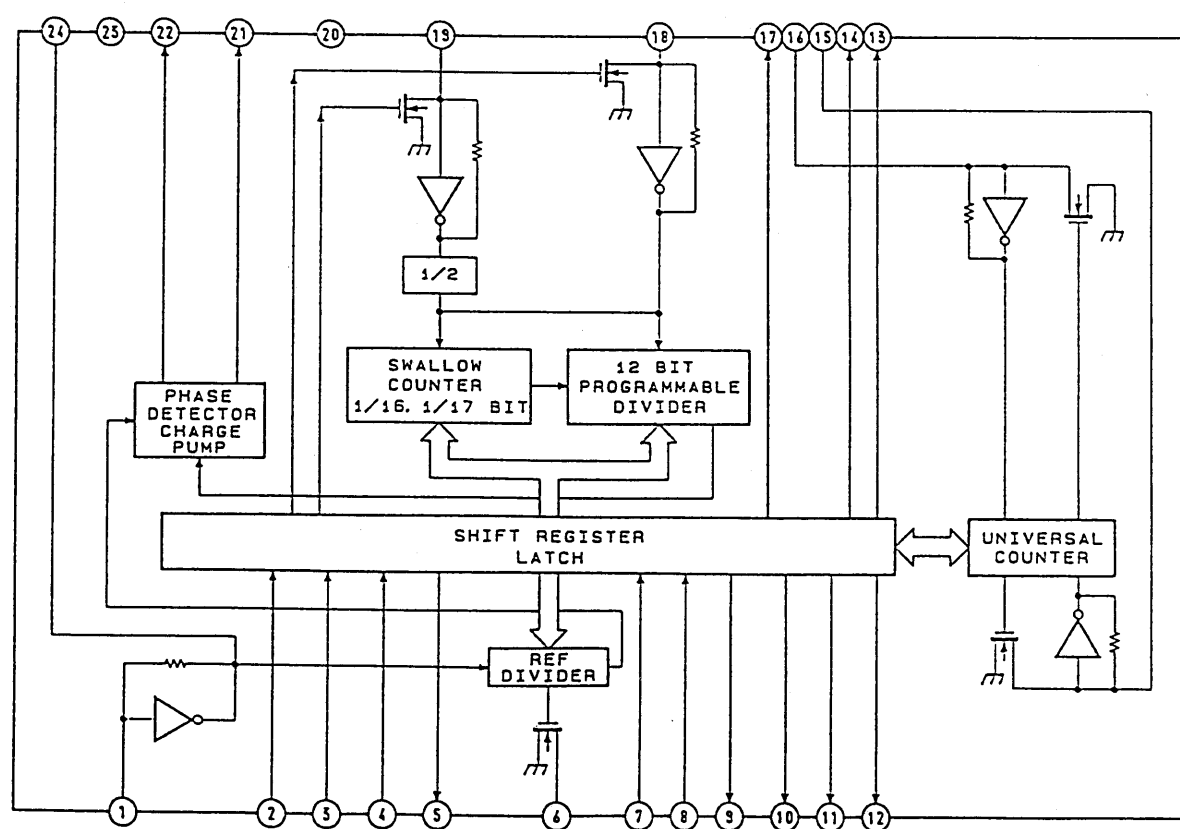


• IC Block Diagrams

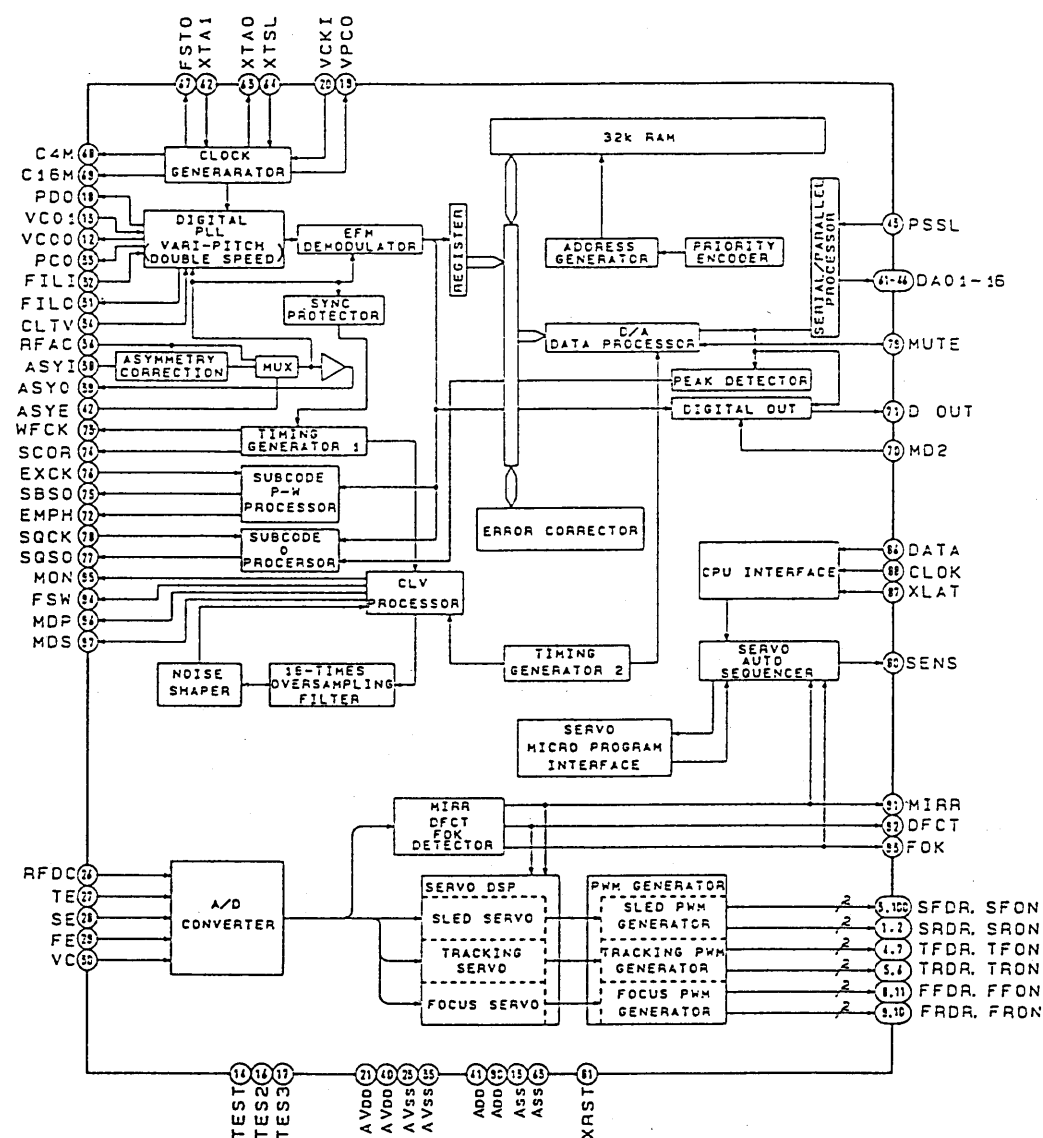
IC1 LA1835



IC51 LC7218

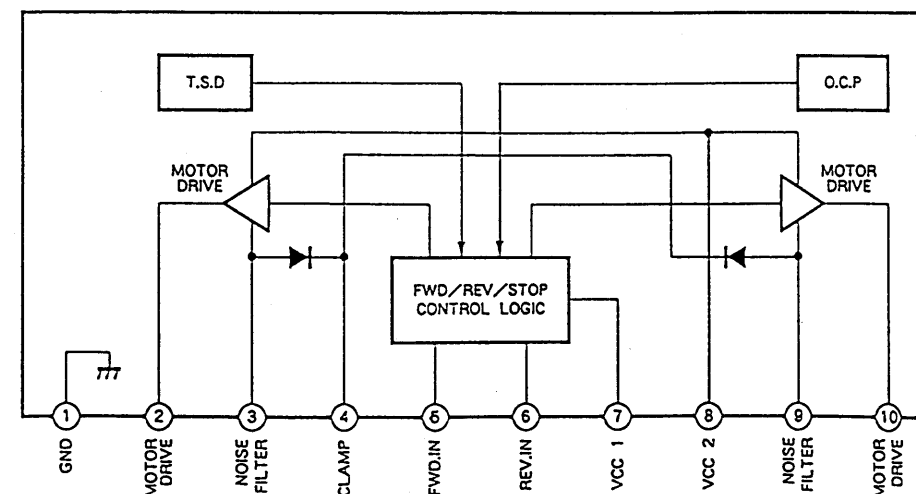


IC101 CXD2515Q

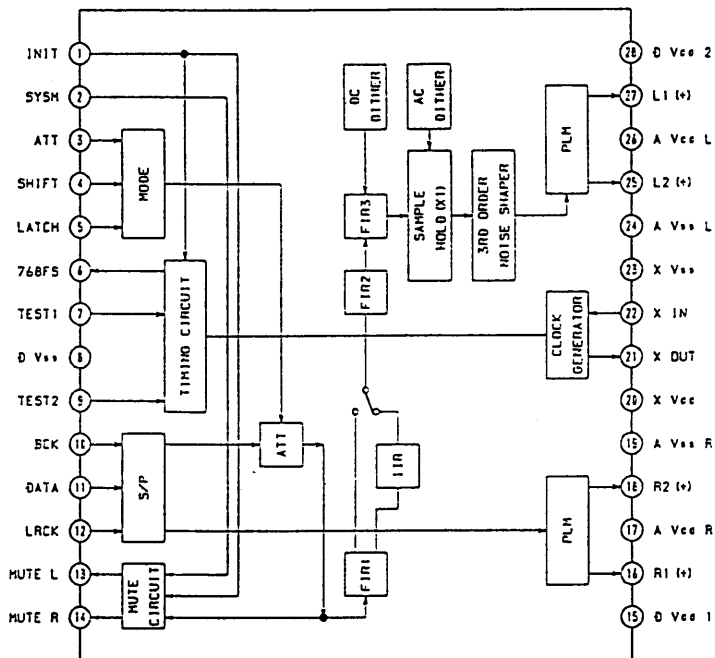


IC304 L78LR05

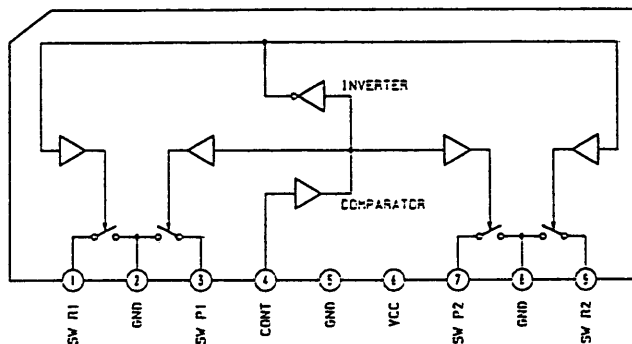
IC1305 L78MR06



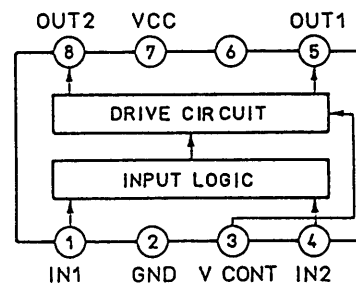
IC103 CXD2565AM-T6



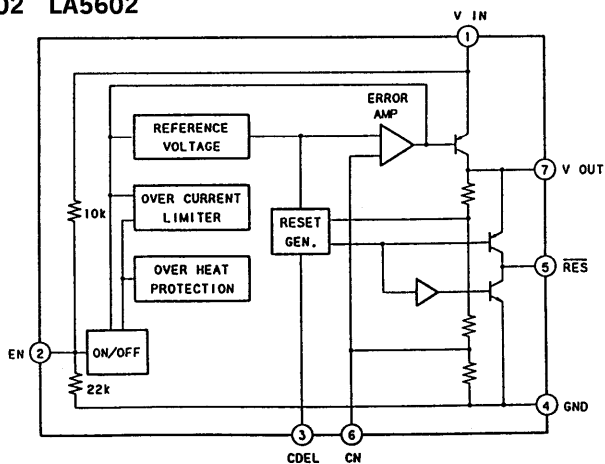
IC906 μ PC1330HA



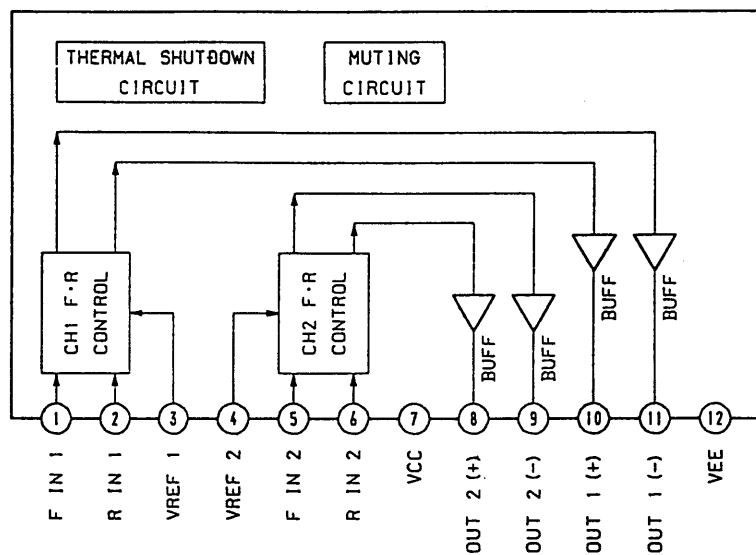
IC1103 LB1639



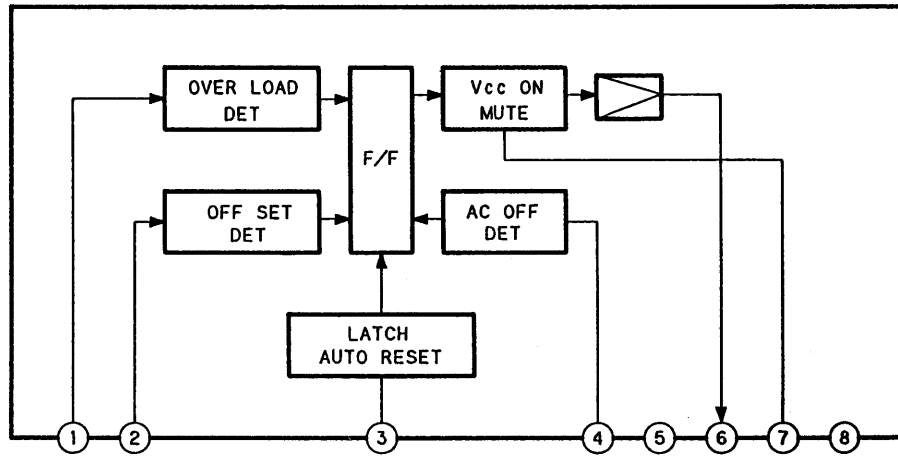
IC302 LA5602



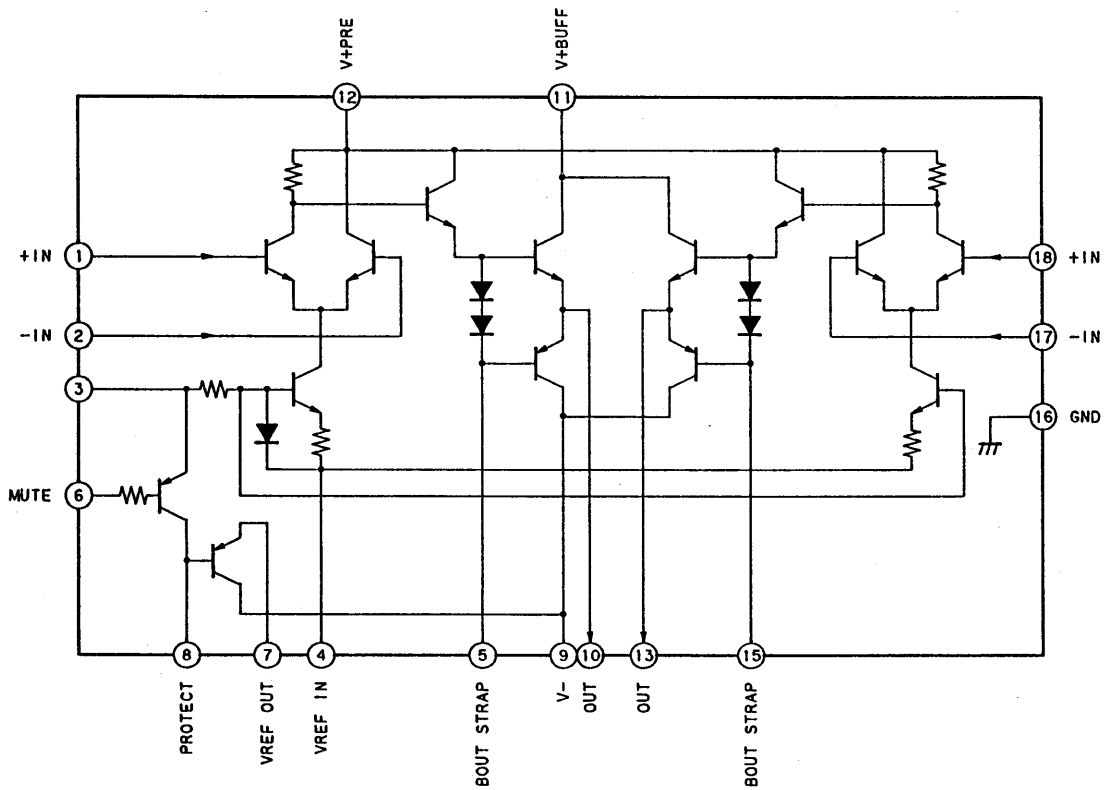
IC341 BA6191



IC1202 μ PC1237HA



IC1201 STK-4142MK2



5-15. PIN DESCRIPTION

• IC601 μ PD78042AGF-022-3B9

Pin No.	Pin Name	I/O	Pin Description
1	7G	O	FL tube digit output
2	6G	O	FL tube digit output
3	5G	O	FL tube digit output
4	4G	O	FL tube digit output
5	3G	O	FL tube digit output
6	2G	O	FL tube digit output
7	1G	O	FL tube digit output
8	VDD	—	Microcomputer power (5V)
9	CL	O	Serial clock output to LC7218 (PLL IC).
10	SO/IF COUNT NG	O	Serial data output to LC7218 (PLL IC).
11	SI	I	Serial data input from LC7218 (PLL IC).
12	CE/TIMER CLOCK	I	Chip enable input from LC7218 (PLL IC).
13	TUNED IN	I	Modulation signal from tuner block. (L...Field)
14	STEREO IN	I	Stereo signal from tuner block. (L...FM STEREO received)
15	MUTING	O	Audio mute (L: Mute)
16	AUX. OUT	—	Not used.
17	RESET	—	Microcomputer reset pin
18	FUNCTION A	O	Function control
19	FUNCTION B	O	Function control
20	AVSS	—	A/D GND for key input.
21	DISPLAY. DATA. 3	I	CD display data bit 3
22	DISPLAY. DATA. 2	I	CD display data bit 2
23	DISPLAY. DATA. 1	I	CD display data bit 1
24	DISPLAY. DATA. 0	I	CD display data bit 0
25	AUB. OUT	O	AU BUS output
26	RELAY	—	Not used.
27	KEY IN1	I	Key input (A/D change line 1)
28	KEY IN0	I	Key input (A/D change line 0)
29	AVDD	—	A/D power for key input (5V)
30	AVREF	—	A/D reference voltage (5V)
31	CD. BUSY	I	At H, CD is Active. (At H, tuner is fundamentally not operated.)
32	—	—	Not used.
33	GND	—	Microcomputer GND
34	X1	—	Crystal connection pin for Main•clock oscillator.
35	X2	—	Crystal connection pin for Main•clock oscillator.
36	POWER. MUTE	—	Not used.
37	TAPE. LED	O	Tape function LED
38	CD. LED	O	CD function LED
39	TUNER. LED	O	Tuner function LED
40	VIDEO. LED	O	Video function LED
41	EQ. C	O	Preset•equalizer control
42	EQ. B	O	Preset•equalizer control
43	EQ. A	O	Preset•equalizer control
44	HOLD	I	Power cut detection pin (Normally: H, AC no connect: L)

Pin No.	Pin Name	I/O	Pin Description
45	CD. CLOCK	I	CD display data clock
46	SIRCS IN	I	SIRCS input
47	AUB. IN	I	AU BUS input
48	—	—	Connect to GND.
49	FUNCTION. C	—	Not used.
50	VOL. B	O	Volume control (VOL DOWN)
51	VOL. A	O	Volume control (VOL UP)
52	VDD	—	Microcomputer power (5V)
53	—	—	Not used.
54	DIODE. IN2	—	Not used.
55	DIODE. IN1	I	Distination•model discrimination input
56	S0	O	FL tube segment output
57	S1	O	FL tube segment output
58	S2	O	Distination•model discrimination output
59	S3	O	Distination•model discrimination output
60	S4	O	FL tube segment output
61	S5	O	Distination•model discrimination output
62	S6	O	FL tube segment output
63	S7	O	FL tube segment output
64	S8	O	FL tube segment output
65	S9	O	FL tube segment output
66	S10	O	FL tube segment output
67	S11	O	FL tube segment output
68	S12	O	FL tube segment output
69	S13	O	FL tube segment output
70	S14	O	FL tube segment output
71	V. LOAD	—	Minus voltage for FL tube.
72	S15	O	FL tube segment output
73	S16	O	FL tube segment output
74	S17	O	FL tube segment output
75	S18	O	FL tube segment output
76	S19	O	FL tube segment output
77	S20	O	FL tube segment output
78	VOL. LED	O	Volume LED output
79	9G	—	Not used.
80	8G	O	FL tube digit output

SECTION 6 EXPLODED VIEWS

NOTE:

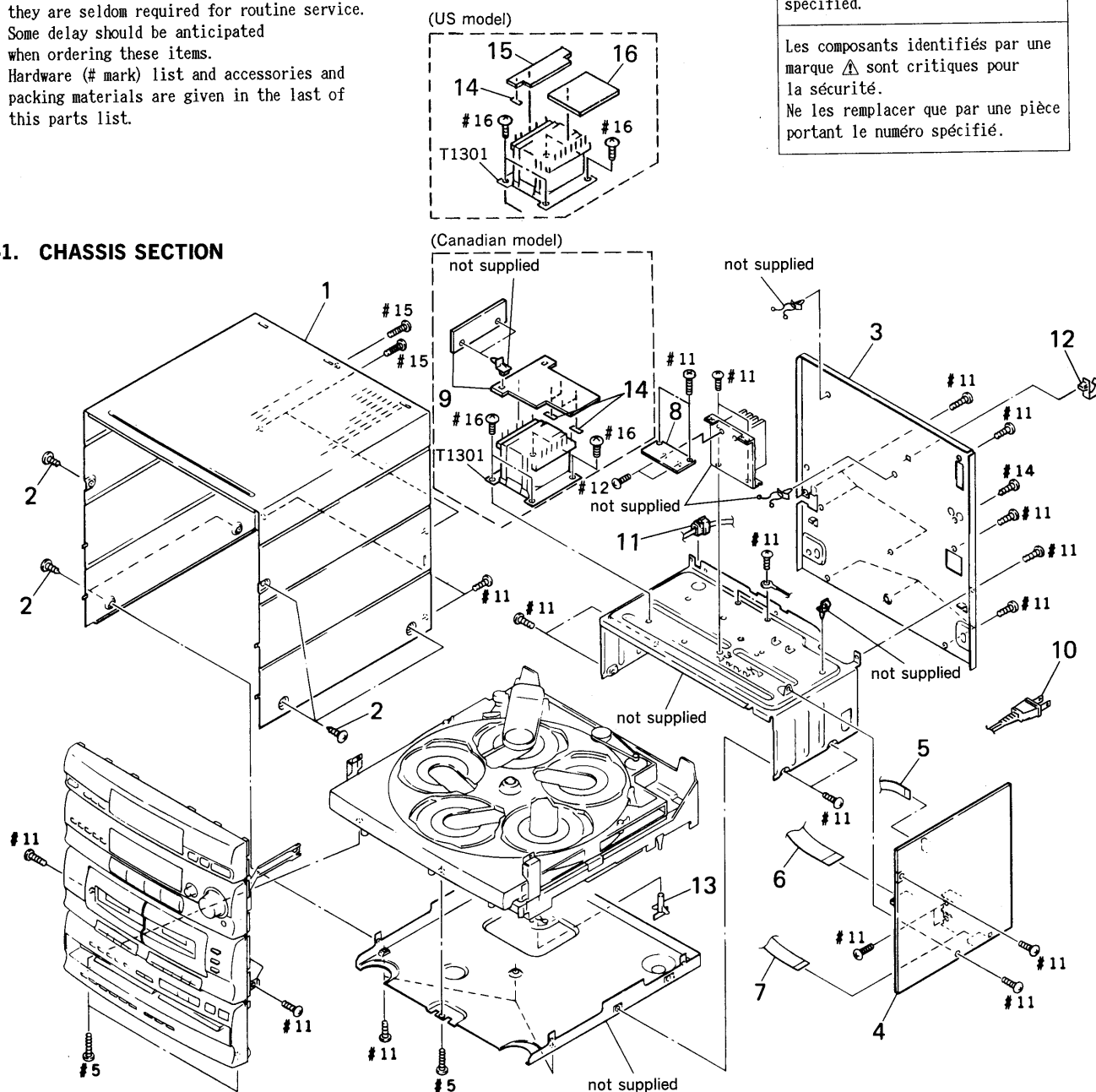
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

- -XX and -X mean standardized parts, so they may have some difference from the original one.

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

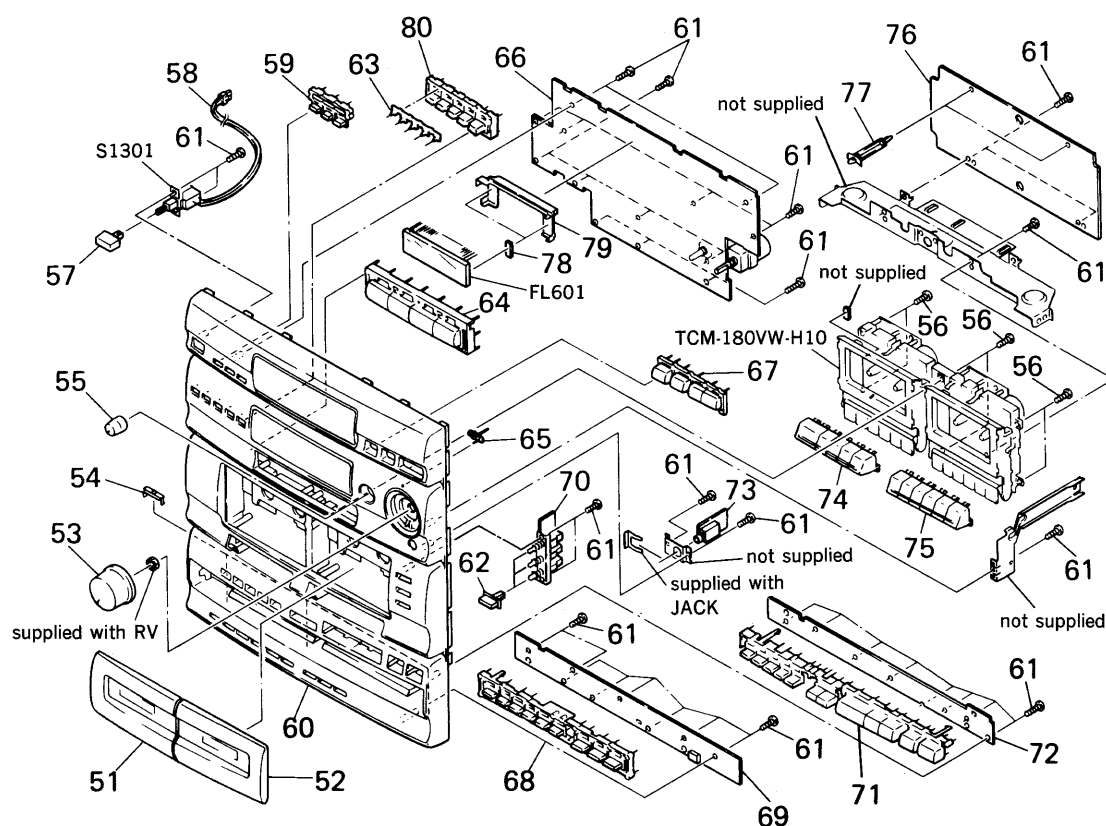
Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

6-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-965-091-31	CASE (CDM)		* 9	1-650-434-21	POWER BOARD (Canadian)	
2	3-363-099-01	SCREW (CASE 3 TP2)		Δ 10	1-690-609-21	CORD, POWER	
* 3	4-965-093-71	PANEL, BACK (US)		* 11	3-703-244-00	BUSHING (2104), CORD	
* 3	4-965-093-81	PANEL, BACK (Canadian)		* 12	4-949-235-01	HOOK	
* 4	A-4377-049-A	MAIN BOARD, COMPLETE (Canadian)		13	4-937-945-01	PLATE (TRANSPORT), LOCK	
* 4	A-4377-805-A	MAIN BOARD, COMPLETE (US)		* 14	3-701-946-26	LABEL, FUSE RATING	
5	1-751-026-11	WIRE (FLAT TYPE) (11 CORE)		* 15	1-656-897-11	POWER PRIMARY BOARD (US)	
6	1-751-747-11	WIRE (FLAT TYPE) (23 CORE)		* 16	1-656-896-11	POWER SECONDARY BOARD (US)	
7	1-765-234-11	CORD, CONNECTION (17 CORE)		Δ T1301	1-427-731-11	TRANSFORMER, POWER (Canadian)	
* 8	A-4371-530-A	POWER AMPLIFIER BOARD, COMPLETE (Canadian)		Δ T1301	1-427-926-11	TRANSFORMER, POWER (US)	
* 8	A-4377-807-A	POWER AMPLIFIER BOARD, COMPLETE (US)					

6-2. FRONT PANEL SECTION



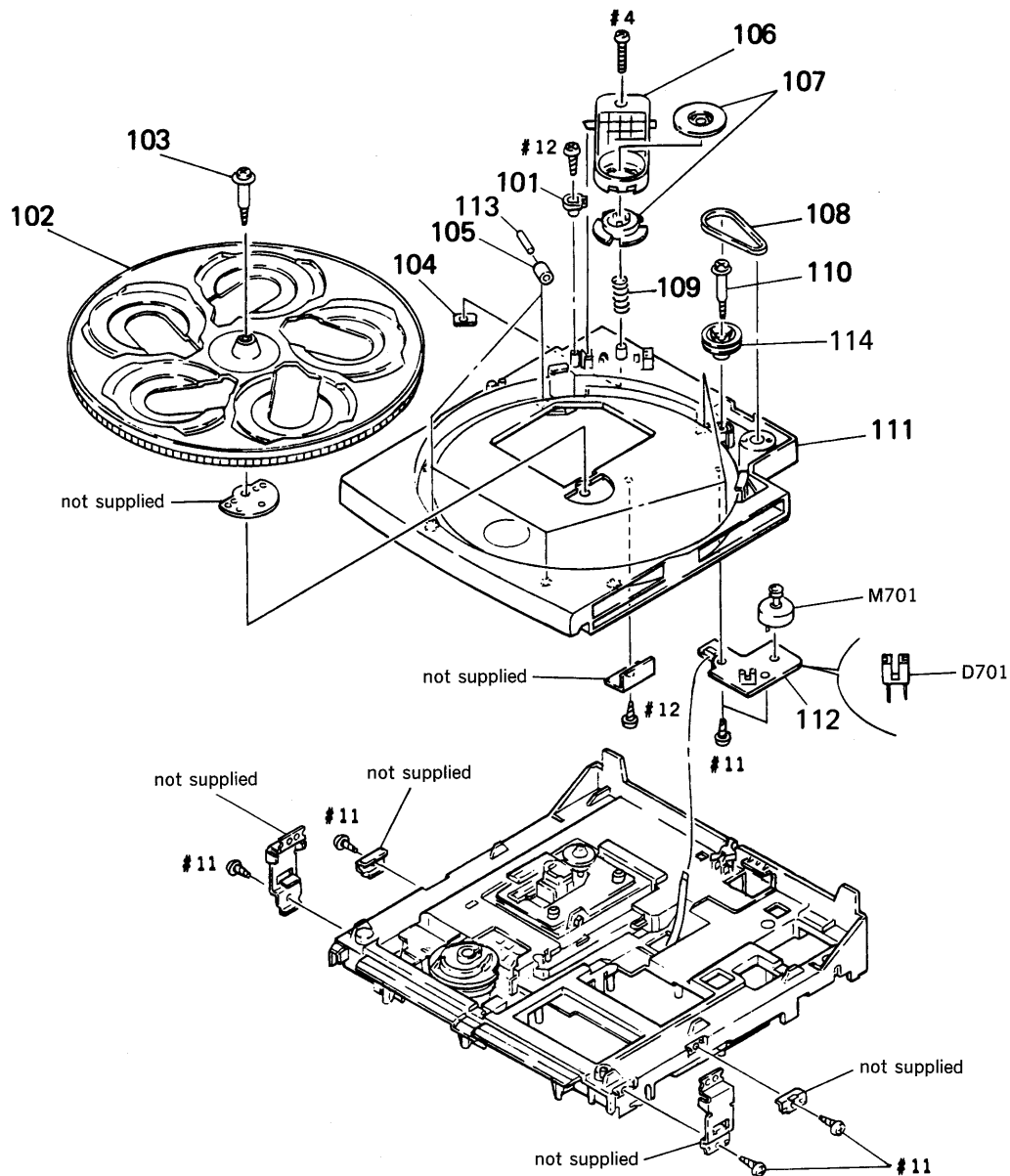
The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
51	A-4353-845-A	LID (A) ASSY, CASSETTE	
52	A-4353-846-A	LID (B) ASSY, CASSETTE	
53	4-955-635-21	KNOB (V)	
* 54	4-962-705-21	CHASSIS, HOLDER	
55	4-962-703-22	KNOB (SUR)	
56	4-951-620-11	SCREW (2.6X10), +BVTP	
57	4-930-783-11	BUTTON (PO)	
* 58	1-690-708-11	CORD (WITH CONNECTOR) (US)	
58	1-765-058-11	CORD (WITH CONNECTOR) (Canadian)	
59	4-962-660-11	BUTTON (MEMORY)	
60	X-4945-480-1	PANEL ASSY, FRONT	
61	4-951-620-01	SCREW (2.6X8), +BVTP	
62	4-964-288-11	BUTTON (DDT-3)	
63	4-962-677-11	INDICATOR (SELECT 5)	
64	4-962-662-31	BUTTON (FU)	
65	4-962-682-11	INDICATOR (VO)	
* 66	A-4377-046-A	PANEL BOARD, COMPLETE	

Ref. No.	Part No.	Description	Remark
67	4-962-661-11	BUTTON (BAND)	
68	4-962-666-11	BUTTON (PROGRAM)	
* 69	1-653-354-11	CD LOWER BOARD	
* 70	1-653-356-11	SW BOARD	
71	X-4944-977-1	BUTTON (CDM) ASSY	
* 72	1-653-353-11	CD UPPER BOARD	
* 73	1-653-355-11	H.P. BOARD	
74	4-962-663-11	BUTTON (MD-A)	
75	4-962-664-11	BUTTON (MD-B)	
* 76	A-4371-393-A	MAIN TC BOARD, COMPLETE	
* 77	4-960-235-11	HOLDER, PC BOARD	
* 78	4-949-935-01	CUSHION (FL)	
* 79	4-955-792-21	HOLDER (5M), FL. TUBE	
80	4-962-678-11	BUTTON (SELECT 5)	
FL601	1-517-259-11	INDICATOR TUBE, FLUORESCENT	
Δ S1301	1-572-267-61	SWITCH, PUSH (AC POWER) (1 KEY) (POWER)	

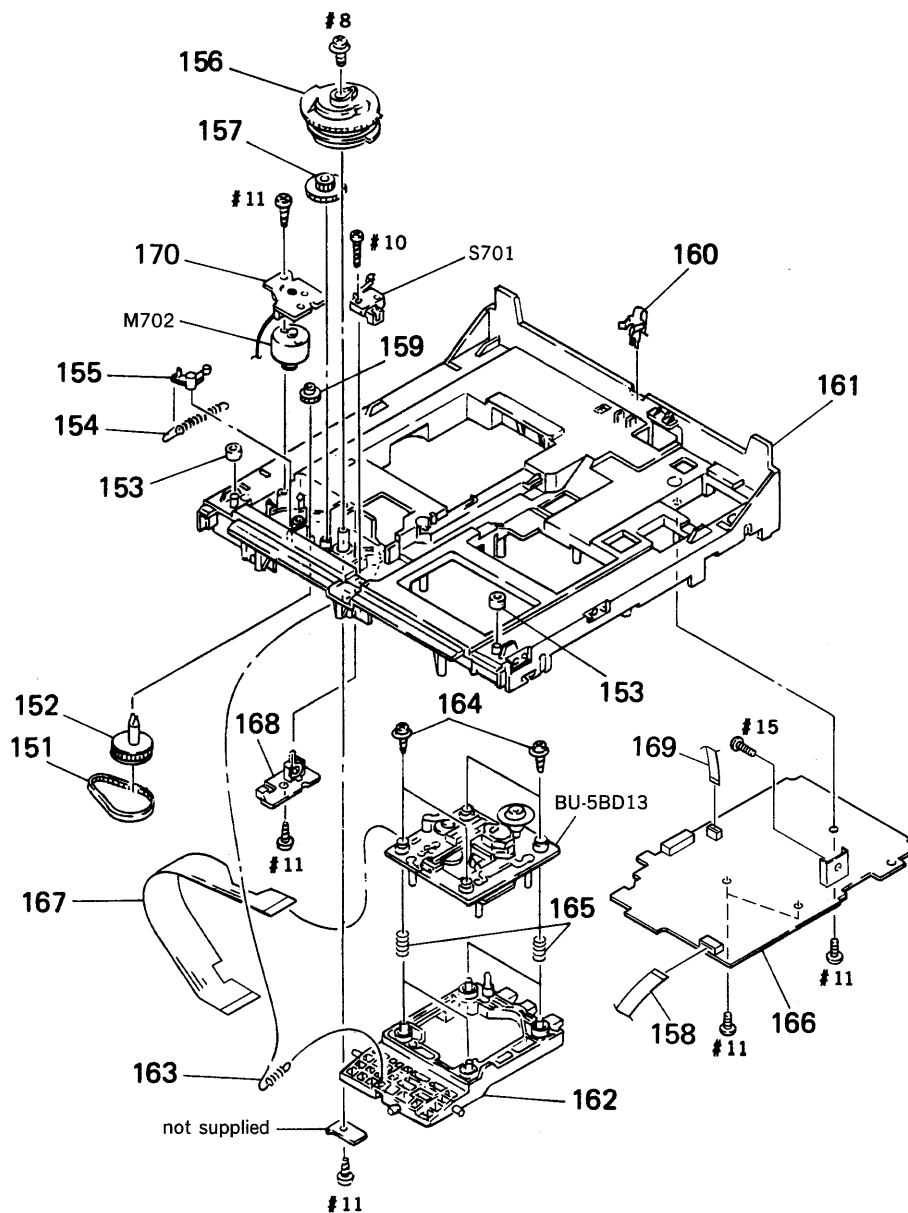
6-3. TRAY SECTION



Ref. No.	Part No.	Description	Remark
* 101	4-949-226-01	PLATE, LOCK	
* 102	4-926-383-01	TABLE (B), DISC	
103	4-926-384-01	SCREW, STEP	
* 104	4-926-388-01	BRACKET (ADJUSTMENT)	
105	X-4924-457-1	ROLLER ASSY	
* 106	4-930-506-02	BRACKET (PRESS PULLEY)	
* 107	1-452-538-11	MAGNET	
108	4-926-399-01	BELT	

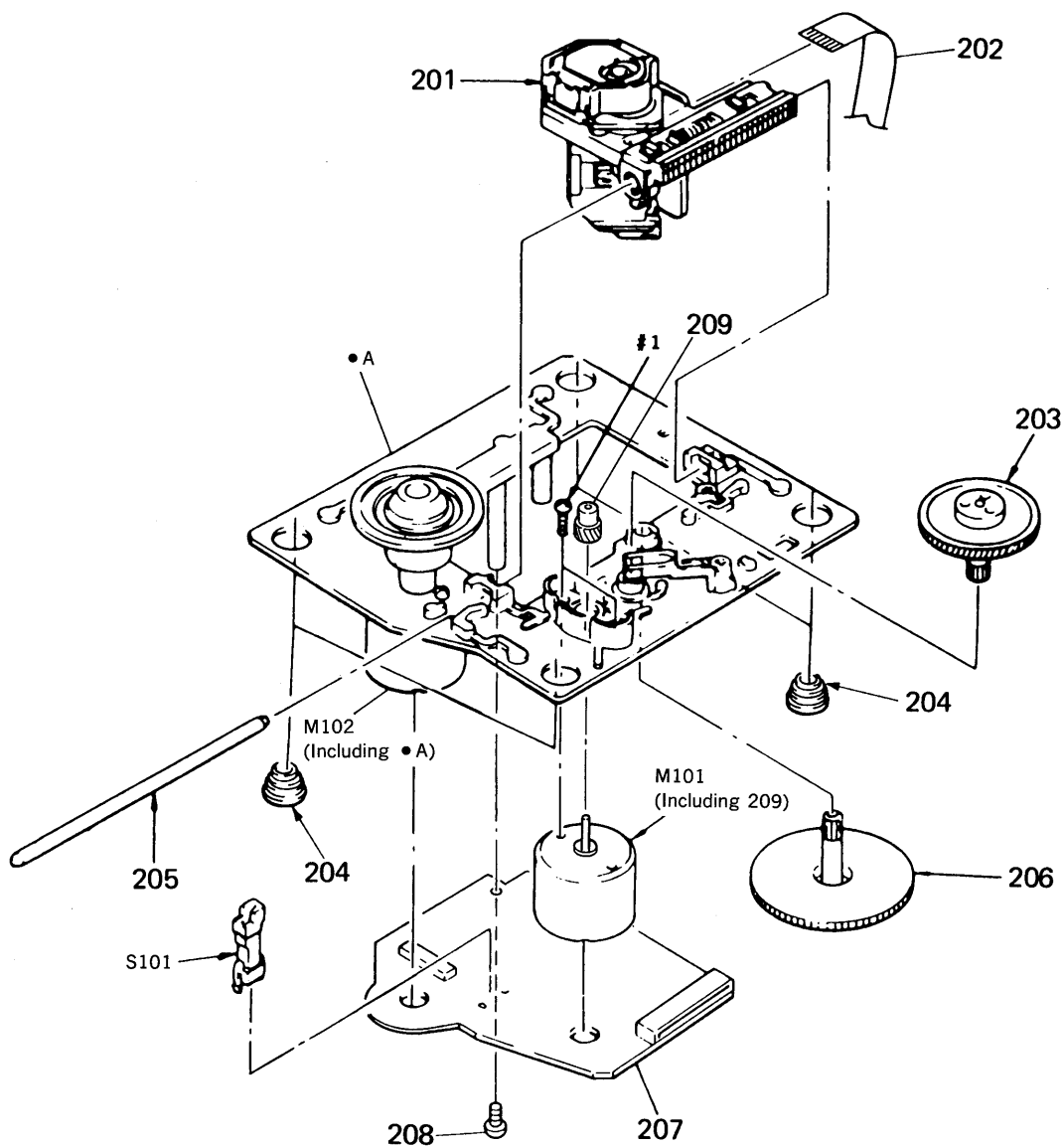
Ref. No.	Part No.	Description	Remark
109	4-926-395-01	SPRING, COMPRESSION	
110	4-923-597-01	SCREW, STEP	
111	4-955-787-52	TABLE, DISC	
* 112	1-638-729-11	TABLE MOTOR BOARD	
113	4-934-376-01	SHAFT (ROLLER)	
114	4-934-380-01	PULLEY (R)	
D701	8-719-970-19	PHOTO SENSOR GP1A521	
M701	A-4353-976-A	MOTOR ASSY, ROTARY	

6-4. CD CHASSIS SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	4-944-490-01	BELT (TIMING)		* 162	4-934-373-01	BRACKET (BU)	
152	X-4941-529-1	PULLEY ASSY		163	4-937-911-01	SPRING, TENSION	
* 153	4-951-619-01	CUSHION (A)		164	4-933-134-01	SCREW (+PTPWH M2. 6X6)	
154	4-924-412-01	SPRING (B), TENSION		165	4-958-593-01	SPRING (BU), COMPRESSION	
155	4-917-519-01	LEVER, SET		* 166	A-4371-375-A	CD MAIN BOARD, COMPLETE	
156	4-934-391-01	GEAR (LOADING A)		167	1-537-645-11	JUMPER, FILM (WITH TERMINAL)	
157	4-934-381-01	GEAR (LOADING C)		* 168	1-638-731-11	OPEN/UP SW BOARD	
158	1-765-195-11	WIRE (FLAT TYPE) (7 CORE)		169	1-590-849-11	WIRE, FLAT TYPE (5 CORE)	
159	4-934-375-11	GEAR (LOADING B)		* 170	1-638-288-11	LOADING MOTOR BOARD	
* 160	4-943-996-06	SPRING, LEAF		M702	A-4353-974-A	MOTOR ASSY, LOADING	
* 161	4-943-997-31	CHASSIS		S701	1-572-713-11	SWITCH, PUSH (WITH CONNECTOR) (DOWN)	

**6-5. OPTICAL PICK-UP BLOCK SECTION
(BU-5BD13)**



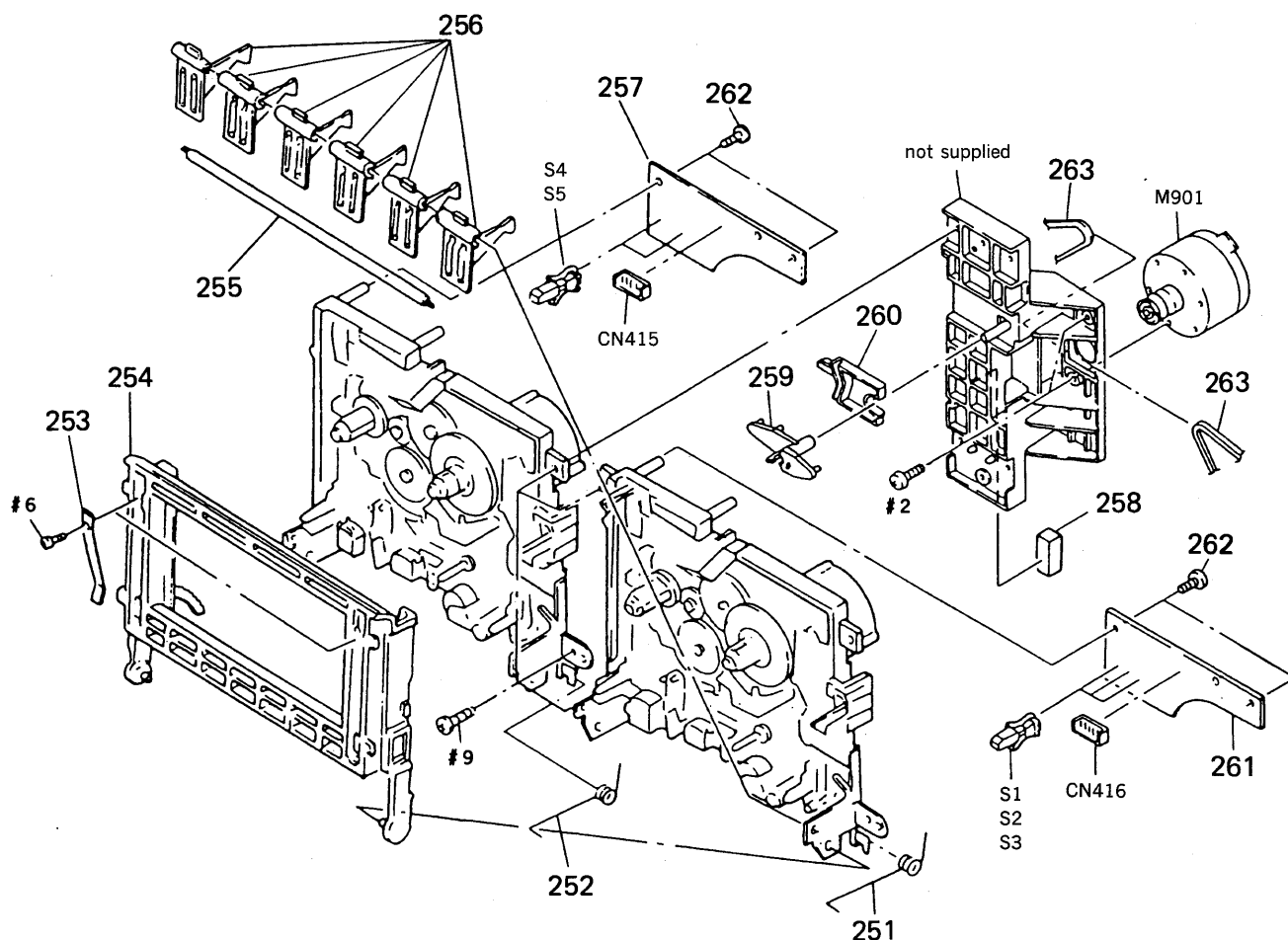
The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
\triangle 201	8-848-144-11	PICK-UP, OPTICAL KSS-240A	
202	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
203	4-917-567-21	GEAR (M)	
204	4-951-940-01	INSULATOR (BU)	
205	4-917-565-01	SHAFT, SLED	
206	4-917-564-01	GEAR (P), FLATNESS	

Ref. No.	Part No.	Description	Remark
* 207	A-4649-890-A	BD BOARD, COMPLETE	
208	4-951-620-01	SCREW (2.6X8), +BVTP	
209	4-917-566-01	GEAR (S)	
M101	X-4917-504-1	MOTOR ASSY (SLED MOTOR)	
M102	X-4917-523-4	BASE (OUTSERT) ASSY (SPINDLE MOTOR)	
S101	1-572-085-11	SWITCH, LEAF (LIMIT)	

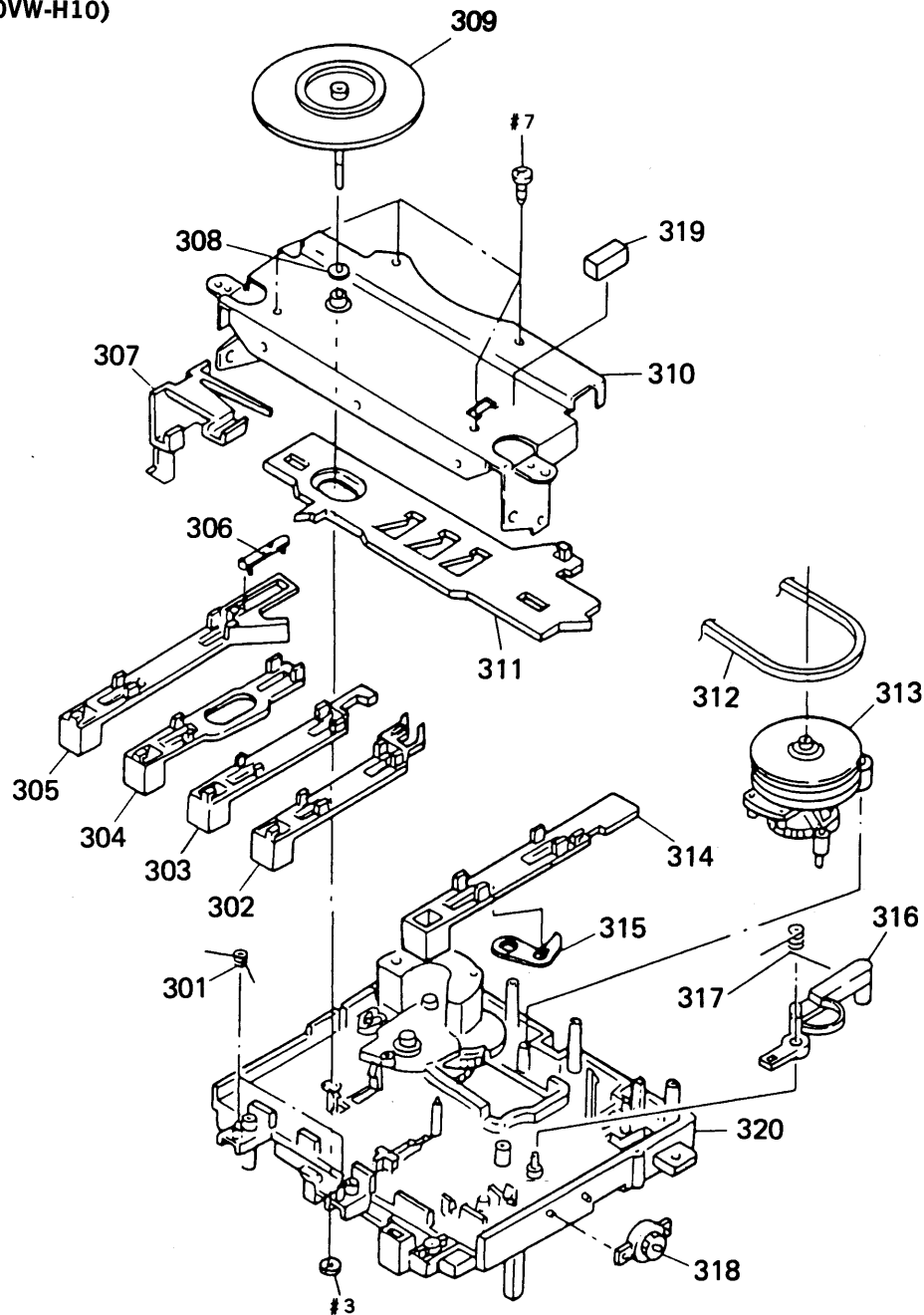
6-6. MECHANISM DECK SECTION 1
(TCM-180VW-H10)



Ref. No.	Part No.	Description	Remark
251	3-358-287-01	SPRING (LOADING A), TORSION	
252	3-358-229-01	SPRING (LOADING), TORSION	
253	3-358-209-01	SPRING (CASSETTE HOLDER), LEAF	
254	3-358-266-02	HOLDER, CASSETTE	
255	3-371-917-01	SHAFT (BUTTON SHAFT 4)	
256	3-369-335-01	LEVER (BUTTON BASE F)	
* 257	1-640-702-11	LEAF SW (A) BOARD	
* 258	3-358-289-01	SPACER (VIBRATION PROOF MAT)	
259	3-358-203-01	LEVER (TRIGGER)	
260	3-358-202-01	SLIDER (TRIGGER)	
* 261	1-640-703-11	LEAF SW (B) BOARD	

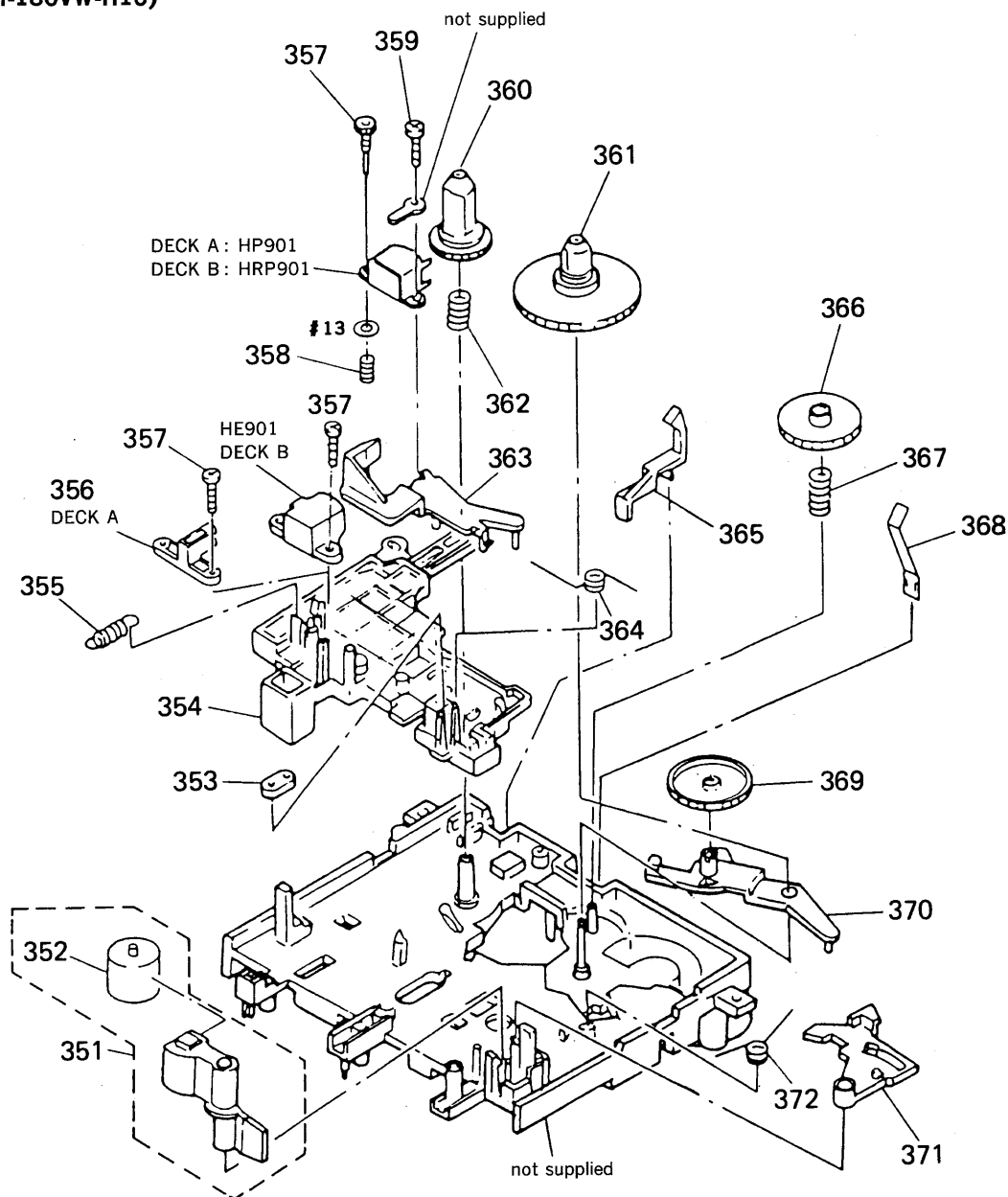
Ref. No.	Part No.	Description	Remark
262	4-951-620-01	SCREW (2.6X8), +BVTP	
263	3-364-777-01	BELT (WH)	
* CN415	1-568-942-11	PIN, CONNECTOR 4P	
* CN416	1-568-943-11	PIN, CONNECTOR 5P	
M901	X-3362-377-1	MOTOR (WH) ASSY	
S1	1-571-736-11	SWITCH, LEAF (MOTOR) (DECK B)	
S2	1-571-736-11	SWITCH, LEAF (PLAY) (DECK B)	
S3	1-571-736-11	SWITCH, LEAF (REC) (DECK B)	
S4	1-571-736-11	SWITCH, LEAF (MOTOR) (DECK A)	
S5	1-571-736-11	SWITCH, LEAF (PLAY) (DECK A)	

**6-7. MECHANISM DECK SECTION 2
(TCM-180VW-H10)**



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
301	3-358-232-01	SPRING (S-P F-R), TORSION		* 311	3-358-249-01	SLIDER (LOCK PLATE)	
302	3-358-258-01	SLIDER (REW)		312	3-358-230-01	BELT (A1)	
303	3-358-257-01	SLIDER (FF)		313	X-3358-202-1	LEVER (FR ARM) ASSY	
304	3-358-256-01	SLIDER (STOP/EJECT)		314	3-358-259-01	SLIDER (REC) (DECK B)	
305	3-358-260-01	SLIDER (PAUSE)		* 315	3-358-204-01	LEVER (REC SAFETY) (DECK B)	
* 306	3-358-226-01	LEVER (PAUSE LEVER)		316	3-358-286-02	LEVER (MOTOR LEVER)	
* 307	3-358-261-02	SLIDER (HOLDER LOCK)		317	3-358-214-01	SPRING (LOCK), TORSION (DECK A)	
308	3-701-437-01	WASHER		317	3-358-233-01	SPRING (REC-LOCK), TORSION (DECK B)	
309	X-3358-205-1	FLYWHEEL (A) ASSY (DECK B)		318	3-319-224-51	DAMPER, SMALL	
309	X-3366-859-1	FLYWHEEL (D) ASSY (DECK A)		* 319	3-358-289-01	SPACER (VIBRATION PROOF MAT)	
310	X-3365-582-1	BRACKET (D) ASSY		320	X-3358-207-2	CHASSIS (A) ASSY	

6-8. MECHANISM DECK SECTION 3
(TCM-180VW-H10)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
351	X-3358-204-1	LEVER (PINCH LEVER) ASSY		364	3-358-228-01	SPRING, TORSION	
352	3-578-143-11	PINCH ROLLER		* 365	3-358-255-01	LEVER (GB LEVER)	
* 353	3-358-215-01	BUSHING (WIRE KIT RETAINER)		* 366	3-358-224-01	GEAR (FF GEAR)	
354	3-358-265-01	SLIDER (HEAD PC BOARD A)		367	3-358-207-01	SPRING (FF GEAR), COMPRESSION	
355	3-358-217-01	SPRING, TENSION		368	3-358-227-01	SPRING, LEAF	
* 356	3-363-931-01	GUIDE, TAPE (DECK A)		* 369	3-358-284-01	GEAR (TU GEAR)	
357	3-358-288-11	SCREW (T), AZIMUTH		* 370	3-358-252-01	LEVER (TU ARM)	
358	3-358-234-01	SPRING (AZIMUTH), COMPRESSION		* 371	3-358-253-01	LEVER (SHUT-OFF LEVER)	
359	3-358-288-01	SCREW (T), AZIMUTH		372	3-358-243-01	SPRING (TU-SHUT), TORSION	
360	3-358-248-01	GEAR (SUPPLY REEL)		HE901	1-543-673-11	HEAD, MAGNETIC (ERASE) (DECK B)	
361	X-3358-203-1	TABLE (T) ASSY, REEL		HP901	1-543-319-11	HEAD, MAGNETIC (PB) (DECK A)	
362	3-358-208-01	SPRING (SUPPLY), COMPRESSION		HRP901	1-543-319-11	HEAD, MAGNETIC (REC/PB) (DECK B)	
* 363	3-358-251-01	LEVER (TENSION DETECTION ARM)					

BD

BD

CD LOWER

CD MAIN

Ref. No.	Part No.	Description	Remark
R182-185			
	1-216-080-00	METAL CHIP 20K 5%	1/10W
R187	1-216-035-00	METAL CHIP 270 5%	1/10W
R188	1-216-121-00	METAL CHIP 1M 5%	1/10W
R189	1-414-234-11	INDUCTOR, FERRITE BEAD	
< SWITCH >			
S101	1-572-085-11	SWITCH, LEAF (LIMIT)	
< VIBRATOR >			
X101	1-579-904-11	VIBRATOR, CRYSTAL (33.8MHz)	

*	1-653-354-11	CD LOWER BOARD	

< CONNECTOR >			
CN201	1-691-644-11	SOCKET, CONNECTOR 7P	
< RESISTOR >			
R201	1-249-418-11	CARBON 1.2K 5%	1/4W
R202	1-247-836-11	CARBON 1.6K 5%	1/4W
R203	1-249-421-11	CARBON 2.2K 5%	1/4W
R204	1-249-423-11	CARBON 3.3K 5%	1/4W
R205	1-249-426-11	CARBON 5.6K 5%	1/4W
R206	1-247-856-00	CARBON 11K 5%	1/4W
R207	1-249-418-11	CARBON 1.2K 5%	1/4W
R208	1-247-836-11	CARBON 1.6K 5%	1/4W
< SWITCH >			
S201	1-554-303-21	SWITCH, TACTILE (PROGRAM (PLAY MODE))	
S202	1-554-303-21	SWITCH, TACTILE (SHUFFLE (PLAY MODE))	
S203	1-554-303-21	SWITCH, TACTILE (CONTINUE (PLAY MODE))	
S204	1-554-303-21	SWITCH, TACTILE (EDIT)	
S205	1-554-303-21	SWITCH, TACTILE (CLEAR)	
S206	1-554-303-21	SWITCH, TACTILE (CHECK)	
S207	1-554-303-21	SWITCH, TACTILE (MUSIC SCAN)	
S208	1-554-303-21	SWITCH, TACTILE (REPEAT)	
S209	1-554-303-21	SWITCH, TACTILE (TIME)	

*	A-4371-375-A	CD MAIN BOARD, COMPLETE	

	7-685-871-01	SCREW +BVTT 3X6 (S)	
< CAPACITOR >			
C306	1-126-059-11	ELECT 10uF	20% 50V
C307	1-126-163-11	ELECT 4.7uF	20% 50V
C308	1-124-472-11	ELECT 470uF	20% 10V

Ref. No.	Part No.	Description	Remark
C309	1-124-473-11	ELECT 1000uF	20% 10V
C311	1-126-300-11	ELECT 0.47uF	20% 50V
C312	1-124-472-11	ELECT 470uF	20% 10V
C314	1-126-059-11	ELECT 10uF	20% 50V
C315	1-126-163-11	ELECT 4.7uF	20% 50V
C317	1-126-163-11	ELECT 4.7uF	20% 50V
C318	1-164-159-11	CERAMIC 0.1uF	50V
C320	1-161-494-00	CERAMIC 0.022uF	25V
C321	1-126-022-11	ELECT 47uF	20% 16V
C322	1-161-494-00	CERAMIC 0.022uF	25V
C323	1-164-159-11	CERAMIC 0.1uF	50V
C341	1-126-376-11	ELECT 470uF	20% 25V
C362	1-164-159-11	CERAMIC 0.1uF	50V
C364	1-164-159-11	CERAMIC 0.1uF	50V
C366	1-162-282-31	CERAMIC 100PF	10% 50V
C371-374			
	1-162-284-31	CERAMIC 150PF	10% 50V
C375	1-130-479-00	MYLAR 0.0047uF	5% 50V
C376	1-130-479-00	MYLAR 0.0047uF	5% 50V
C377	1-130-472-00	MYLAR 0.0012uF	5% 50V
C378	1-130-472-00	MYLAR 0.0012uF	5% 50V
C379	1-124-443-00	ELECT 100uF	20% 10V
C380	1-124-443-00	ELECT 100uF	20% 10V
C381	1-162-291-31	CERAMIC 560PF	10% 50V
C382	1-162-291-31	CERAMIC 560PF	10% 50V
< CONNECTOR >			
CN301	1-750-585-11	CONNECTOR, FFC/FPC 7P	
* CN303	1-568-943-11	PIN, CONNECTOR 5P	
CN305	1-750-997-11	CONNECTOR, FFC/FPC 5P	
CN306	1-764-415-11	CONNECTOR, FFC/FPC 26P	
* CN309	1-568-836-11	SOCKET, CONNECTOR 17P	
< DIODE >			
D321	8-719-987-63	DIODE 1N4148M	
D341	8-719-010-42	DIODE UZ-5.6BSB	
< IC >			
IC302	8-759-061-65	IC LA5602	
IC304	8-759-805-37	IC L78LR05D-MA	
IC305	8-759-071-48	IC TA7807S	
IC321	8-752-857-34	IC CXP82316-043Q	
IC341	8-759-172-31	IC BA6191	
IC371	8-759-634-51	IC M5218AP	
IC372	8-759-634-51	IC M5218AP	
< DIODE >			
JW304	8-719-024-99	DIODE 11ES2-NTA2B	
JW317	8-719-024-99	DIODE 11ES2-NTA2B	

CD MAIN

CD UPPER

H. P

LEAF SW (A)

Ref. No.	Part No.	Description	Remark
JW427	8-719-987-63	DIODE 1N4148M	
JW428	8-719-987-63	DIODE 1N4148M	
< TRANSISTOR >			
Q302	8-729-900-65	TRANSISTOR DTA144ES	
Q303	8-729-900-89	TRANSISTOR DTC144ES	
Q322	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q352	8-729-900-65	TRANSISTOR DTA144ES	
Q353	8-729-900-65	TRANSISTOR DTA144ES	
< RESISTOR >			
R308	1-260-064-11	CARBON 1 5% 1/2W	
R321	1-249-429-11	CARBON 10K 5% 1/4W	
R322	1-249-429-11	CARBON 10K 5% 1/4W	
R323	1-249-417-11	CARBON 1K 5% 1/4W	
R324-329			
	1-249-428-11	CARBON 8.2K 5% 1/4W	
R333	1-249-417-11	CARBON 1K 5% 1/4W	
R334	1-249-425-11	CARBON 4.7K 5% 1/4W	
R335	1-249-429-11	CARBON 10K 5% 1/4W	
R336	1-249-429-11	CARBON 10K 5% 1/4W	
R338-340			
	1-249-425-11	CARBON 4.7K 5% 1/4W	
R341-344			
	1-247-876-11	CARBON 75K 5% 1/4W	
R345	1-249-423-11	CARBON 3.3K 5% 1/4W	
R346	1-249-424-11	CARBON 3.9K 5% 1/4W	
R347	1-249-415-11	CARBON 680 5% 1/4W	
R348	1-247-834-11	CARBON 1.3K 5% 1/4W	
R359	1-249-417-11	CARBON 1K 5% 1/4W	
R360	1-249-417-11	CARBON 1K 5% 1/4W	
R361	1-249-429-11	CARBON 10K 5% 1/4W	
R363	1-249-417-11	CARBON 1K 5% 1/4W	
R365-368			
	1-249-417-11	CARBON 1K 5% 1/4W	
R371-374			
	1-247-852-11	CARBON 7.5K 5% 1/4W	
R375-378			
	1-249-431-11	CARBON 15K 5% 1/4W	
R379-382			
	1-249-419-11	CARBON 1.5K 5% 1/4W	
R383	1-249-441-11	CARBON 100K 5% 1/4W	
R384	1-249-441-11	CARBON 100K 5% 1/4W	
R385	1-249-421-11	CARBON 2.2K 5% 1/4W	
R386	1-249-421-11	CARBON 2.2K 5% 1/4W	
R389	1-247-807-31	CARBON 100 5% 1/4W	
R390	1-247-807-31	CARBON 100 5% 1/4W	
< VIBRATOR >			
X321	1-579-175-11	VIBRATOR, CERAMIC (10MHz)	

Ref. No.	Part No.	Description	Remark
*	1-653-353-11	CD UPPER BOARD *****	
< DIODE >			
D201	8-719-313-72	LED SEL3810A-CD (II)	
D202	8-719-313-66	LED SEL6410E-TH12 (▷)	
< RESISTOR >			
R209	1-249-421-11	CARBON 2.2K 5% 1/4W	
R210	1-249-423-11	CARBON 3.3K 5% 1/4W	
R211	1-249-426-11	CARBON 5.6K 5% 1/4W	
R212	1-247-856-00	CARBON 11K 5% 1/4W	
R213	1-249-418-11	CARBON 1.2K 5% 1/4W	
R214	1-247-836-11	CARBON 1.6K 5% 1/4W	
R215	1-249-421-11	CARBON 2.2K 5% 1/4W	
R216	1-249-423-11	CARBON 3.3K 5% 1/4W	
R217	1-249-426-11	CARBON 5.6K 5% 1/4W	
R218	1-247-856-00	CARBON 11K 5% 1/4W	
R219	1-249-411-11	CARBON 330 5% 1/4W	
R220	1-249-410-11	CARBON 270 5% 1/4W	
< SWITCH >			
S210	1-554-303-21	SWITCH, TACTILE (1 (DISC SELECT))	
S211	1-554-303-21	SWITCH, TACTILE (2 (DISC SELECT))	
S212	1-554-303-21	SWITCH, TACTILE (3 (DISC SELECT))	
S213	1-554-303-21	SWITCH, TACTILE (4 (DISC SELECT))	
S214	1-554-303-21	SWITCH, TACTILE (5 (DISC SELECT))	
S215	1-554-303-21	SWITCH, TACTILE (◀◀ (AMS))	
S216	1-554-303-21	SWITCH, TACTILE (▶▶ (AMS))	
S217	1-554-303-21	SWITCH, TACTILE (▷)	
S218	1-554-303-21	SWITCH, TACTILE (II)	
S219	1-554-303-21	SWITCH, TACTILE (■)	
S220	1-554-303-21	SWITCH, TACTILE (DISC SKIP)	
S221	1-554-303-21	SWITCH, TACTILE (△ OPEN/CLOSE)	

*	1-653-355-11	H. P BOARD *****	
< JACK >			
CNJ1201	1-569-113-11	JACK, LARGE TYPE (HEADPHONES)	

*	1-640-702-11	LEAF SW (A) BOARD *****	
< CAPACITOR >			
C544	1-164-159-11	CERAMIC 0.1uF	50V

LEAF SW (A)

LEAF SW (B)

LOADING MOTOR

MAIN

Ref. No.	Part No.	Description	Remark
< CONNECTOR >			
* CN415	1-568-942-11	PIN, CONNECTOR 4P	
< SWITCH >			
S4	1-571-736-11	SWITCH, LEAF (MOTOR (DECK A))	
S5	1-571-736-11	SWITCH, LEAF (PLAY (DECK A))	

*	1-640-703-11	LEAF SW (B) BOARD	

< CAPACITOR >			
C545	1-164-159-11	CERAMIC 0.1uF	50V
< CONNECTOR >			
* CN416	1-568-943-11	PIN, CONNECTOR 5P	
< SWITCH >			
S1	1-571-736-11	SWITCH, LEAF (MOTOR (DECK B))	
S2	1-571-736-11	SWITCH, LEAF (PLAY (DECK B))	
S3	1-571-736-11	SWITCH, LEAF (REC (DECK B))	

*	1-638-288-11	LOADING MOTOR BOARD	

< CAPACITOR >			
C705	1-162-302-11	CERAMIC 0.0022uF	30% 16V

*	A-4377-049-A	MAIN BOARD, COMPLETE (Canadian)	
*	A-4377-805-A	MAIN BOARD, COMPLETE (US)	

	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
< CAPACITOR >			
C1	1-162-306-11	CERAMIC 0.01uF	30% 16V
C2	1-104-664-11	ELECT 47uF	20% 16V
C3	1-162-306-11	CERAMIC 0.01uF	30% 16V
C4	1-162-306-11	CERAMIC 0.01uF	30% 16V
C5	1-164-159-11	CERAMIC 0.1uF	50V
C6	1-162-306-11	CERAMIC 0.01uF	30% 16V
C7	1-104-664-11	ELECT 47uF	20% 16V
C8-10	1-162-306-11	CERAMIC 0.01uF	30% 16V
C11	1-124-907-11	ELECT 10uF	20% 50V
C12	1-124-902-00	ELECT 0.47uF	20% 50V
C13	1-124-903-11	ELECT 1uF	20% 50V

Ref. No.	Part No.	Description	Remark
C14	1-124-903-11	ELECT 1uF	20% 50V
C15-18	1-124-907-11	ELECT 10uF	20% 50V
C19	1-136-160-00	FILM 0.039uF	5% 50V
C20	1-136-160-00	FILM 0.039uF	5% 50V
C21	1-161-046-00	CERAMIC 0.0039uF	10% 25V
C22	1-161-046-00	CERAMIC 0.0039uF	10% 25V
C23	1-124-903-11	ELECT 1uF	20% 50V
C24	1-162-294-31	CERAMIC 0.001uF	10% 50V
C25	1-162-303-11	CERAMIC 0.0033uF	30% 16V
C26	1-104-664-11	ELECT 47uF	20% 16V
C27	1-126-962-11	ELECT 3.3uF	20% 50V
C28	1-161-494-00	CERAMIC 0.022uF	25V
C29	1-124-907-11	ELECT 10uF	20% 50V
C30	1-161-494-00	CERAMIC 0.022uF	25V
C31	1-101-005-00	CERAMIC 22000PF	50V
C32	1-162-198-31	CERAMIC 8.2PF	10% 50V
C33	1-162-306-11	CERAMIC 0.01uF	30% 16V
C45	1-162-306-11	CERAMIC 0.01uF	30% 16V
C51	1-102-961-00	CERAMIC 27PF	5% 50V
C52	1-102-961-00	CERAMIC 27PF	5% 50V
C53	1-104-664-11	ELECT 47uF	20% 16V
C54-58	1-162-306-11	CERAMIC 0.01uF	30% 16V
C61	1-124-925-11	ELECT 2.2uF	20% 100V
C62	1-124-463-00	ELECT 0.1uF	20% 50V
C63	1-162-306-11	CERAMIC 0.01uF	30% 16V
C64	1-162-306-11	CERAMIC 0.01uF	30% 16V
C65	1-124-120-11	ELECT 220uF	20% 25V
C67	1-162-306-11	CERAMIC 0.01uF	30% 16V
C75	1-162-199-31	CERAMIC 10PF	5% 50V
C1001	1-124-257-00	ELECT 2.2uF	20% 50V
C1007	1-124-257-00	ELECT 2.2uF	20% 50V
C1010	1-104-664-11	ELECT 47uF	20% 16V
C1051	1-124-257-00	ELECT 2.2uF	20% 50V
C1057	1-124-257-00	ELECT 2.2uF	20% 50V
C1060	1-104-664-11	ELECT 47uF	20% 16V
C1221	1-104-665-11	ELECT 100uF	20% 16V
C1222	1-104-665-11	ELECT 100uF	20% 16V
			(US)
C1222	1-104-666-11	ELECT 220uF	20% 6.3V
			(Canadian)
C1223	1-104-666-11	ELECT 220uF	20% 6.3V
△C1302	1-102-394-11	CERAMIC 0.01uFX2	250V
C1304	1-126-974-11	ELECT 3300uF	20% 50V
C1305	1-126-974-11	ELECT 3300uF	20% 50V
C1306	1-104-664-11	ELECT 47uF	20% 16V
C1308	1-104-665-11	ELECT 100uF	20% 16V
C1309	1-104-665-11	ELECT 100uF	20% 16V
			(Canadian)

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Ref. No.	Part No.	Description	Remark
C1309	1-124-472-11	ELECT	470uF 20% 10V (US)
C1312	1-124-563-11	ELECT	2200uF 20% 25V
C1313	1-126-946-11	ELECT	6800uF 20% 25V
C1314	1-124-122-11	ELECT	100uF 20% 50V
C1315	1-124-907-11	ELECT	10uF 20% 50V
C1316	1-126-967-11	ELECT	47uF 20% 35V
C1319	1-124-463-00	ELECT	0.1uF 20% 50V
C1320	1-124-907-11	ELECT	10uF 20% 50V
C1321	1-162-306-11	CERAMIC	0.01uF 30% 16V
C1322	1-162-306-11	CERAMIC	0.01uF 30% 16V
C1324	1-124-907-11	ELECT	10uF 20% 50V
C1326	1-124-907-11	ELECT	10uF 20% 50V
C1330	1-104-665-11	ELECT	100uF 20% 16V
△C1331	1-102-394-11	CERAMIC	0.01uFX2 250V
C1340	1-124-556-11	ELECT	2200uF 20% 16V
C1341	1-124-907-11	ELECT	10uF 20% 50V
C1346	1-124-925-11	ELECT	2.2uF 20% 100V
C1351	1-126-968-11	ELECT	100uF 20% 35V
C1352	1-126-972-11	ELECT	1000uF 20% 35V
C1353	1-136-165-00	FILM	0.1uF 5% 50V
C1354	1-136-165-00	FILM	0.1uF 5% 50V
C1361	1-126-968-11	ELECT	100uF 20% 35V
C1380	1-164-159-11	CERAMIC	0.1uF 50V
< FILTER >			
CF1	1-567-389-11	FILTER, CERAMIC	
CF2	1-567-389-11	FILTER, CERAMIC	
CF4	1-527-981-00	FILTER, CERAMIC	
CF5	1-577-075-11	OSCILLATOR, CERAMIC	
CF6	1-760-220-11	FILTER, CERAMIC	
< CONNECTOR >			
* CN1	1-750-416-11	CONNECTOR, FFC/FPC 11P	
* CN1201	1-537-327-11	TERMINAL BOARD	
* CN1204	1-566-060-11	PIN, CONNECTOR 8P	
* CN1205	1-566-058-11	PIN, CONNECTOR 6P	
CN1206	1-750-428-11	CONNECTOR, FFC/FPC 23P	
* CN1208	1-750-422-11	CONNECTOR, FFC/FPC 17P	
CN1231	1-506-468-11	PIN, CONNECTOR 3P	
* CN1301	1-566-062-11	PIN, CONNECTOR 10P	
< DIODE >			
D1	8-719-987-63	DIODE 1N4148M	
D1202	8-719-987-63	DIODE 1N4148M	
D1204	8-719-987-63	DIODE 1N4148M	
D1301	8-719-025-03	DIODE RBA-402-SL (Canadian)	
D1301	8-719-510-68	DIODE D5SBA20F01 (US)	
D1302	8-719-200-82	DIODE 11ES2	

Ref. No.	Part No.	Description	Remark
D1303	8-719-200-82	DIODE 11ES2	
D1304	8-719-200-82	DIODE 11ES2	
D1305	8-719-200-82	DIODE 11ES2	
D1306	8-719-001-43	DIODE UZL-11M1-TA	
D1307	8-719-200-82	DIODE 11ES2	
D1308	8-719-002-60	DIODE UZL-33L	
D1309	8-719-014-66	DIODE UZP-5.6B	
D1310	8-719-987-63	DIODE 1N4148M	
D1311	8-719-200-82	DIODE 11ES2	
D1312	8-719-200-82	DIODE 11ES2	
D1313	8-719-200-82	DIODE 11ES2	
D1314	8-719-200-82	DIODE 11ES2	
D1315	8-719-987-63	DIODE 1N4148M	
D1316	8-719-987-63	DIODE 1N4148M	
D1317	8-719-200-82	DIODE 11ES2	
D1318	8-719-200-82	DIODE 11ES2	
D1385	8-719-200-82	DIODE 11ES2	
< FRONT END >			
FE1	1-465-673-11	FRONT END (2 BAND)	
FE2	1-239-634-11	ENCAPSULATED COMPONENT, AM. RF	
< IC >			
IC1	8-759-176-03	IC LA1835	
IC51	8-759-175-87	IC LC7218-ST	
IC1002	8-759-000-48	IC MC14052BCP	
IC1003	8-759-634-51	IC M5218AP	
IC1202	8-759-111-68	IC uPC1237HA	
IC1303	8-759-605-00	IC M5F78M07L	
IC1304	8-759-604-95	IC M5F79M07L	
IC1305	8-759-820-13	IC L78MR06	
< IFT >			
IFT1	1-409-636-11	TRANSFORMER, IF (CERAMIC FILTER)	
< JACK >			
* J1001	1-580-691-11	JACK, PIN 2P (VIDEO IN)	
< COIL >			
L1	1-410-688-31	INDUCTOR 1.5mH	
< LPF >			
LPF1	1-239-597-11	FILTER, LOW PASS	
LPF2	1-239-597-11	FILTER, LOW PASS	
< TRANSISTOR >			
Q1	8-729-230-99	TRANSISTOR 2SC2669-OY	

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MAIN

Ref. No.	Part No.	Description	Remark
Q55	8-729-422-57	TRANSISTOR UN4111	
Q61	8-729-202-67	TRANSISTOR 2SK246-GR3	
Q62	8-729-201-84	TRANSISTOR 2SC3112-B	
Q1001	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1051	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1204	8-729-900-63	TRANSISTOR DTA124ES	
Q1301	8-729-141-83	TRANSISTOR 2SB1094-LK	
Q1302	8-729-209-15	TRANSISTOR 2SD2012	

< RESISTOR >

R1	1-249-411-11	CARBON	330	5%	1/4W	
R2	1-249-411-11	CARBON	330	5%	1/4W	
R3	1-247-815-91	CARBON	220	5%	1/4W	
△R4	1-249-402-11	CARBON	56	5%	1/4W	F
R5	1-247-891-00	CARBON	330K	5%	1/4W	
R6	1-249-411-11	CARBON	330	5%	1/4W	
△R9	1-249-405-11	CARBON	100	5%	1/4W	F
R10	1-249-437-11	CARBON	47K	5%	1/4W	
R12	1-249-429-11	CARBON	10K	5%	1/4W	
R13	1-249-442-11	CARBON	510	5%	1/4W	
△R14	1-249-403-11	CARBON	68	5%	1/4W	F
R16	1-249-429-11	CARBON	10K	5%	1/4W	
R17	1-247-842-11	CARBON	3K	5%	1/4W	
R18	1-249-429-11	CARBON	10K	5%	1/4W	
R19	1-249-441-11	CARBON	100K	5%	1/4W	
R20	1-249-435-11	CARBON	33K	5%	1/4W	
R21	1-249-441-11	CARBON	100K	5%	1/4W	
R22	1-249-437-11	CARBON	47K	5%	1/4W	
R23	1-249-399-11	CARBON	33	5%	1/4W	
R35	1-249-423-11	CARBON	3.3K	5%	1/4W	
R36	1-249-423-11	CARBON	3.3K	5%	1/4W	
R45	1-249-426-11	CARBON	5.6K	5%	1/4W	
R46	1-249-426-11	CARBON	5.6K	5%	1/4W	
R48	1-249-423-11	CARBON	3.3K	5%	1/4W	
R49	1-249-429-11	CARBON	10K	5%	1/4W	
△R50	1-249-401-11	CARBON	47	5%	1/4W	F
R51-54						
	1-249-417-11	CARBON	1K	5%	1/4W	
R56	1-249-425-11	CARBON	4.7K	5%	1/4W	
R57	1-249-417-11	CARBON	1K	5%	1/4W	
R58	1-249-417-11	CARBON	1K	5%	1/4W	
△R60	1-249-405-11	CARBON	100	5%	1/4W	F
R61	1-249-423-11	CARBON	3.3K	5%	1/4W	
R62	1-249-425-11	CARBON	4.7K	5%	1/4W	
R63	1-249-414-11	CARBON	560	5%	1/4W	
R64	1-249-417-11	CARBON	1K	5%	1/4W	
R65	1-249-410-11	CARBON	270	5%	1/4W	
R66	1-249-421-11	CARBON	2.2K	5%	1/4W	
R67	1-249-425-11	CARBON	4.7K	5%	1/4W	

Ref. No.	Part No.	Description	Remark
R68	1-249-425-11	CARBON	4.7K 5% 1/4W
R69	1-247-807-31	CARBON	100 5% 1/4W
R1001	1-249-417-11	CARBON	1K 5% 1/4W
R1007	1-249-441-11	CARBON	100K 5% 1/4W
R1010	1-249-417-11	CARBON	1K 5% 1/4W
R1016	1-249-437-11	CARBON	47K 5% 1/4W
R1017	1-249-437-11	CARBON	47K 5% 1/4W
R1021	1-249-434-11	CARBON	27K 5% 1/4W
R1023	1-249-434-11	CARBON	27K 5% 1/4W
R1034	1-249-425-11	CARBON	4.7K 5% 1/4W
R1035	1-247-863-91	CARBON	22K 5% 1/4W
R1037	1-249-437-11	CARBON	47K 5% 1/4W
R1051	1-249-417-11	CARBON	1K 5% 1/4W
R1057	1-249-441-11	CARBON	100K 5% 1/4W
R1060	1-249-417-11	CARBON	1K 5% 1/4W
R1071	1-249-434-11	CARBON	27K 5% 1/4W
R1073	1-249-434-11	CARBON	27K 5% 1/4W
R1084	1-249-425-11	CARBON	4.7K 5% 1/4W
R1085	1-247-863-91	CARBON	22K 5% 1/4W
R1087	1-249-437-11	CARBON	47K 5% 1/4W
R1222	1-249-415-11	CARBON	680 5% 1/4W
R1223	1-249-415-11	CARBON	680 5% 1/4W
△R1226	1-215-891-11	METAL OXIDE	680 5% 2W F (US)
△R1226	1-216-454-11	METAL OXIDE	390 5% 2W F (Canadian)
R1233	1-249-425-11	CARBON	4.7K 5% 1/4W
R1234	1-249-425-11	CARBON	4.7K 5% 1/4W
R1235	1-249-435-11	CARBON	33K 5% 1/4W
R1236	1-249-441-11	CARBON	100K 5% 1/4W
R1237	1-249-429-11	CARBON	10K 5% 1/4W
R1240	1-249-438-11	CARBON	56K 5% 1/4W
R1272	1-249-415-11	CARBON	680 5% 1/4W
R1273	1-249-415-11	CARBON	680 5% 1/4W
R1290	1-249-437-11	CARBON	47K 5% 1/4W
R1301	1-249-429-11	CARBON	10K 5% 1/4W
R1302	1-249-429-11	CARBON	10K 5% 1/4W
R1303	1-249-421-11	CARBON	2.2K 5% 1/4W
R1304	1-249-425-11	CARBON	4.7K 5% 1/4W
R1321	1-249-417-11	CARBON	1K 5% 1/4W
R1322	1-249-429-11	CARBON	10K 5% 1/4W
R1345	1-249-421-11	CARBON	2.2K 5% 1/4W

< VARIABLE RESISTOR >

RV1	1-238-601-11	RES, ADJ, CARBON 22K
RV2	1-238-600-11	RES, ADJ, CARBON 10K

< RELAY >

RY1201	1-515-920-11	RELAY (24V)
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Ref. No.	Part No.	Description	Remark		
< TERMINAL >					
* TM1	1-537-264-11	TERMINAL BOARD (ANTENNA)			
< VIBRATOR >					
XT51	1-577-126-31	VIBRATOR, CRYSTAL (7.2MHz)			

*	A-4371-393-A	MAIN TC BOARD, COMPLETE			

*	4-942-204-01	PLATE, GROUND			
< CAPACITOR >					
C700	1-162-282-31	CERAMIC	100PF	10%	50V
C701	1-162-290-31	CERAMIC	470PF	10%	50V
C702	1-137-372-11	FILM	0.022uF	5%	50V
C703	1-124-907-11	ELECT	10uF	20%	50V
C704	1-162-292-31	CERAMIC	680PF	10%	50V
C710	1-162-282-31	CERAMIC	100PF	10%	50V
C711	1-162-289-31	CERAMIC	390PF	10%	50V
C712	1-137-372-11	FILM	0.022uF	5%	50V
C713	1-124-907-11	ELECT	10uF	20%	50V
C715	1-124-443-00	ELECT	100uF	20%	10V
C721	1-137-368-11	FILM	0.0047uF	5%	50V
C722	1-124-903-11	ELECT	1uF	20%	50V
C723	1-126-963-11	ELECT	4.7uF	20%	50V
C724	1-137-399-11	FILM	0.1uF	5%	50V
C725	1-124-907-11	ELECT	10uF	20%	50V
C726	1-124-903-11	ELECT	1uF	20%	50V
C727	1-124-902-00	ELECT	0.47uF	20%	50V
C728	1-126-963-11	ELECT	4.7uF	20%	50V
C729	1-162-291-31	CERAMIC	560PF	10%	50V
C730	1-162-301-11	CERAMIC	0.0015uF	30%	16V
C731	1-164-056-11	CERAMIC	27PF	5%	50V
C732	1-101-890-00	CERAMIC	75PF	5%	50V
C733	1-162-288-31	CERAMIC	330PF	10%	50V
C734	1-164-066-11	CERAMIC	68PF	5%	50V
C800	1-162-282-31	CERAMIC	100PF	10%	50V
C801	1-162-290-31	CERAMIC	470PF	10%	50V
C802	1-137-372-11	FILM	0.022uF	5%	50V
C803	1-124-907-11	ELECT	10uF	20%	50V
C804	1-162-292-31	CERAMIC	680PF	10%	50V
C810	1-162-282-31	CERAMIC	100PF	10%	50V
C811	1-162-289-31	CERAMIC	390PF	10%	50V
C812	1-137-372-11	FILM	0.022uF	5%	50V
C813	1-124-907-11	ELECT	10uF	20%	50V
C815	1-124-443-00	ELECT	100uF	20%	10V
C821	1-137-368-11	FILM	0.0047uF	5%	50V

Ref. No.	Part No.	Description	Remark		
C822	1-124-903-11	ELECT	1uF	20%	50V
C823	1-126-963-11	ELECT	4. 7uF	20%	50V
C824	1-137-399-11	FILM	0. 1uF	5%	50V
C825	1-124-907-11	ELECT	10uF	20%	50V
C826	1-124-903-11	ELECT	1uF	20%	50V
C827	1-124-902-00	ELECT	0. 47uF	20%	50V
C828	1-126-963-11	ELECT	4. 7uF	20%	50V
C829	1-162-291-31	CERAMIC	560PF	10%	50V
C830	1-162-301-11	CERAMIC	0. 0015uF	30%	16V
C831	1-164-056-11	CERAMIC	27PF	5%	50V
C832	1-101-890-00	CERAMIC	75PF	5%	50V
C833	1-162-288-31	CERAMIC	330PF	10%	50V
C834	1-164-066-11	CERAMIC	68PF	5%	50V
C903-908	1-124-443-00	ELECT	100uF	20%	10V
C909	1-124-907-11	ELECT	10uF	20%	50V
C910	1-124-907-11	ELECT	10uF	20%	50V
C913	1-126-963-11	ELECT	4. 7uF	20%	50V
C915	1-126-933-11	ELECT	100uF	20%	16V
C920	1-162-306-11	CERAMIC	0. 01uF	30%	16V
C921	1-124-925-11	ELECT	2. 2uF	20%	100V
C922	1-130-848-00	FILM	0. 0082uF	5%	100V
C923	1-124-902-00	ELECT	0. 47uF	20%	50V
C924	1-137-438-11	FILM	0. 0082uF	5%	50V
C925	1-162-305-11	CERAMIC	0. 0068uF	30%	16V
C926	1-137-436-11	FILM	0. 0039uF	5%	50V
C927	1-137-436-11	FILM	0. 0039uF	5%	50V
C928	1-137-399-11	FILM	0. 1uF	5%	50V
C929	1-124-120-11	ELECT	220uF	20%	25V
C931	1-124-120-11	ELECT	220uF	20%	25V
C942	1-126-963-11	ELECT	4. 7uF	20%	50V
C943	1-124-903-11	ELECT	1uF	20%	50V
C944	1-124-907-11	ELECT	10uF	20%	50V
C945	1-162-306-11	CERAMIC	0. 01uF	30%	16V
C946	1-124-925-11	ELECT	2. 2uF	20%	100V
< CONNECTOR >					
* CN901	1-566-056-11	PIN, CONNECTOR 4P			
* CN902	1-566-057-11	PIN, CONNECTOR 5P			
CN903	1-564-506-11	PLUG, CONNECTOR 3P			
* CN904	1-564-509-11	PLUG, CONNECTOR 6P			
CN905	1-564-505-11	PLUG, CONNECTOR 2P			
* CN906	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P			
* CN911	1-560-061-00	PIN, CONNECTOR 3P			
* CN912	1-560-060-00	PIN, CONNECTOR 2P			
< DIODE >					
D901	8-719-987-63	DIODE	1N4148M		
D902	8-719-987-63	DIODE	1N4148M		

MAIN TC

Ref. No.	Part No.	Description	Remark
D903	8-719-987-63	DIODE 1N4148M	
D904	8-719-987-63	DIODE 1N4148M	
D905	8-719-987-63	DIODE 1N4148M	
D906	8-719-987-63	DIODE 1N4148M	
D907	8-719-987-63	DIODE 1N4148M	
D908	8-719-987-63	DIODE 1N4148M	
D909	8-719-987-63	DIODE 1N4148M	
< IC >			
IC903	8-759-098-73	IC HA12172NT	
IC904	8-759-111-44	IC uPC4570C-1	
IC905	8-759-111-44	IC uPC4570C-1	
IC906	8-759-143-54	IC uPC1330HA	
IC907	8-759-240-81	IC TC4081BP	
< COIL >			
L701	1-410-780-11	INDUCTOR 27mH	
L801	1-410-780-11	INDUCTOR 27mH	
L901	1-414-223-11	INDUCTOR 470uH	
< TRANSISTOR >			
Q701	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q801	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q901	8-729-194-57	TRANSISTOR 2SC945-P	
Q902	8-729-194-57	TRANSISTOR 2SC945-P	
Q903	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q904	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q905	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q906	8-729-900-89	TRANSISTOR DTC144ES	
Q907	8-729-900-89	TRANSISTOR DTC144ES	
Q908	8-729-900-89	TRANSISTOR DTC144ES	
Q909	8-729-900-89	TRANSISTOR DTC144ES	
Q910	8-729-900-65	TRANSISTOR DTA144ES	
Q911	8-729-900-65	TRANSISTOR DTA144ES	
Q912	8-729-900-89	TRANSISTOR DTC144ES	
< RESISTOR >			
R701	1-247-889-00	CARBON 270K 5% 1/4W	
R702	1-249-404-00	CARBON 82 5% 1/4W	
R703	1-247-882-11	CARBON 130K 5% 1/4W	
R704	1-247-850-11	CARBON 6.2K 5% 1/4W	
R711	1-247-889-00	CARBON 270K 5% 1/4W	
R712	1-249-404-00	CARBON 82 5% 1/4W	
R713	1-247-882-11	CARBON 130K 5% 1/4W	
R714	1-247-850-11	CARBON 6.2K 5% 1/4W	
R715	1-247-863-91	CARBON 22K 5% 1/4W	
R720	1-249-425-11	CARBON 4.7K 5% 1/4W	
R721	1-249-429-11	CARBON 10K 5% 1/4W	
R722	1-249-431-11	CARBON 15K 5% 1/4W	

Ref. No.	Part No.	Description	Remark
R723	1-249-429-11	CARBON 10K 5% 1/4W	
R724	1-249-421-11	CARBON 2.2K 5% 1/4W	
R725	1-249-428-11	CARBON 8.2K 5% 1/4W	
R726	1-247-840-00	CARBON 2.4K 5% 1/4W	
R727	1-247-863-91	CARBON 22K 5% 1/4W	
R728	1-249-417-11	CARBON 1K 5% 1/4W	
R731	1-249-430-11	CARBON 12K 5% 1/4W	
R801	1-247-889-00	CARBON 270K 5% 1/4W	
R802	1-249-404-00	CARBON 82 5% 1/4W	
R803	1-247-882-11	CARBON 130K 5% 1/4W	
R804	1-247-850-11	CARBON 6.2K 5% 1/4W	
R811	1-247-889-00	CARBON 270K 5% 1/4W	
R812	1-249-404-00	CARBON 82 5% 1/4W	
R813	1-247-882-11	CARBON 130K 5% 1/4W	
R814	1-247-850-11	CARBON 6.2K 5% 1/4W	
R815	1-247-863-91	CARBON 22K 5% 1/4W	
R820	1-249-425-11	CARBON 4.7K 5% 1/4W	
R821	1-249-429-11	CARBON 10K 5% 1/4W	
R822	1-249-431-11	CARBON 15K 5% 1/4W	
R823	1-249-429-11	CARBON 10K 5% 1/4W	
R824	1-249-421-11	CARBON 2.2K 5% 1/4W	
R825	1-249-428-11	CARBON 8.2K 5% 1/4W	
R826	1-247-840-00	CARBON 2.4K 5% 1/4W	
R827	1-247-863-91	CARBON 22K 5% 1/4W	
R828	1-249-417-11	CARBON 1K 5% 1/4W	
R831	1-249-430-11	CARBON 12K 5% 1/4W	
R902	1-249-389-11	CARBON 4.7 5% 1/4W	
R903-906	1-249-413-11	CARBON 470 5% 1/4W	
R911	1-215-451-00	METAL 18K 1% 1/4W	
R912	1-249-440-11	CARBON 82K 5% 1/4W	
R913	1-247-862-11	CARBON 20K 5% 1/4W	
R914-916	1-249-437-11	CARBON 47K 5% 1/4W	
R917	1-247-864-11	CARBON 24K 5% 1/4W	
R918	1-249-437-11	CARBON 47K 5% 1/4W	
R919	1-247-863-91	CARBON 22K 5% 1/4W	
R920	1-249-429-11	CARBON 10K 5% 1/4W	
R921	1-249-424-11	CARBON 3.9K 5% 1/4W	
R922	1-249-389-11	CARBON 4.7 5% 1/4W	
R923	1-249-434-11	CARBON 27K 5% 1/4W	
R924	1-249-434-11	CARBON 27K 5% 1/4W	
R925	1-249-429-11	CARBON 10K 5% 1/4W	
R926	1-249-389-11	CARBON 4.7 5% 1/4W	
△R931	1-215-905-11	METAL OXIDE 10 5% 3W F	
R932	1-249-426-11	CARBON 5.6K 5% 1/4W	
R933	1-249-442-11	CARBON 510 5% 1/4W	
R934	1-249-441-11	CARBON 100K 5% 1/4W	
R935	1-249-441-11	CARBON 100K 5% 1/4W	

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

MAIN TC

OPEN/UP SW

PANEL

Ref. No.	Part No.	Description	Remark		
R936	1-249-429-11	CARBON	10K	5%	1/4W
R941	1-249-436-11	CARBON	39K	5%	1/4W
R942	1-247-863-91	CARBON	22K	5%	1/4W
R943	1-249-436-11	CARBON	39K	5%	1/4W
R944	1-249-425-11	CARBON	4.7K	5%	1/4W
R945	1-247-863-91	CARBON	22K	5%	1/4W
R946	1-249-421-11	CARBON	2.2K	5%	1/4W
R947	1-249-421-11	CARBON	2.2K	5%	1/4W
R948	1-247-863-91	CARBON	22K	5%	1/4W
R949	1-249-438-11	CARBON	56K	5%	1/4W
R950	1-249-437-11	CARBON	47K	5%	1/4W
R951	1-249-437-11	CARBON	47K	5%	1/4W
R952	1-249-441-11	CARBON	100K	5%	1/4W
R953	1-249-425-11	CARBON	4.7K	5%	1/4W
R954	1-249-429-11	CARBON	10K	5%	1/4W
R955	1-249-441-11	CARBON	100K	5%	1/4W
R956	1-249-441-11	CARBON	100K	5%	1/4W
R957	1-249-429-11	CARBON	10K	5%	1/4W

< VARIABLE RESISTOR >

RV701	1-230-496-11	RES, ADJ, CARBON 10K
RV702	1-230-496-11	RES, ADJ, CARBON 10K
RV703	1-230-496-11	RES, ADJ, CARBON 10K
RV704	1-230-499-11	RES, ADJ, CARBON 100K
RV801	1-230-496-11	RES, ADJ, CARBON 10K

RV802	1-230-496-11	RES, ADJ, CARBON 10K
RV803	1-230-496-11	RES, ADJ, CARBON 10K
RV804	1-230-499-11	RES, ADJ, CARBON 100K
RV901	1-230-495-11	RES, ADJ, CARBON 2.2K
RV902	1-230-495-11	RES, ADJ, CARBON 2.2K

< TRANSFORMER >

T901	1-433-349-11	TRANSFORMER, BIAS OSCILLATION
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*	1-638-731-11	OPEN/UP SW BOARD
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< CONNECTOR >

* CN705	1-566-214-11	PIN, CONNECTOR (PC BOARD) 2P
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< SWITCH >

S702	1-571-300-21	SWITCH, ROTARY (OPEN/UP)
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Ref. No.	Part No.	Description	Remark		
*	A-4377-046-A	PANEL BOARD, COMPLETE	*****		
*	4-949-935-01	CUSHION (FL)			
*	4-955-792-21	HOLDER (5M), FL TUBE			
< CAPACITOR >					
C601	1-164-159-11	CERAMIC	0.1uF		50V
C602	1-124-261-00	ELECT	10uF	20%	50V
C603	1-104-905-11	DOUBLE LAYERS	0.22F		5.5V
C604	1-164-159-11	CERAMIC	0.1uF		50V
C605	1-136-169-00	FILM	0.22uF	5%	50V
C607	1-162-306-11	CERAMIC	0.01uF	30%	16V
C608	1-162-306-11	CERAMIC	0.01uF	30%	16V
C609	1-124-910-11	ELECT	47uF	20%	50V
C610	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1103	1-162-282-31	CERAMIC	100PF	10%	50V
C1104	1-124-257-00	ELECT	2.2uF	20%	50V
C1105	1-124-907-11	ELECT	10uF	20%	50V
C1106	1-124-907-11	ELECT	10uF	20%	50V
C1107	1-124-464-11	ELECT	0.22uF	20%	50V
C1108	1-137-442-11	FILM	0.039uF	5%	50V
C1109	1-137-441-11	FILM	0.027uF	5%	50V
C1110	1-137-457-11	FILM	0.0027uF	5%	50V
C1111	1-162-303-11	CERAMIC	0.0033uF	20%	16V
C1112	1-162-293-31	CERAMIC	820PF	10%	50V
C1113	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1114	1-124-589-11	ELECT	47uF	20%	16V
C1115	1-124-257-00	ELECT	2.2uF	20%	50V
C1120	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1121	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1123	1-162-282-31	CERAMIC	100PF	10%	50V
C1143	1-104-666-11	ELECT	220uF	20%	6.3V
C1153	1-162-282-31	CERAMIC	100PF	10%	50V
C1154	1-124-257-00	ELECT	2.2uF	20%	50V
C1155	1-104-666-11	ELECT	220uF	20%	10V
C1156	1-104-666-11	ELECT	220uF	20%	10V
C1157	1-124-464-11	ELECT	0.22uF	20%	50V
C1158	1-137-442-11	FILM	0.039uF	5%	50V
C1159	1-137-441-11	FILM	0.027uF	5%	50V
C1160	1-137-457-11	FILM	0.0027uF	5%	50V
C1161	1-162-303-11	CERAMIC	0.0033uF	20%	16V
C1162	1-162-293-31	CERAMIC	820PF	10%	50V
C1163	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1164	1-124-589-11	ELECT	47uF	20%	16V
C1165	1-124-257-00	ELECT	2.2uF	20%	50V
C1173	1-162-282-31	CERAMIC	100PF	10%	50V
C1197	1-162-306-11	CERAMIC	0.01uF	30%	16V

PANEL

Ref. No.	Part No.	Description	Remark
< CONNECTOR >			
* CN601	1-750-416-11	CONNECTOR, FFC/FPC 11P	
CN1101	1-750-428-11	CONNECTOR, FFC/FPC 23P	
< COMPOSITION CIRCUIT BLOCK >			
CP601	1-239-505-11	COMPOSITION CIRCUIT BLOCK (220PX9)	
CP602	1-239-505-11	COMPOSITION CIRCUIT BLOCK (220PX9)	
* CP603	1-233-216-11	COMPOSITION CIRCUIT BLOCK (220PX13)	
< DIODE >			
D601	8-719-987-63	DIODE 1N4148M	
D602	8-719-987-63	DIODE 1N4148M	
D603	8-719-987-63	DIODE 1N4148M	
D604	8-719-200-82	DIODE 11ES2	
D622	8-719-987-63	DIODE 1N4148M	
D625	8-719-987-63	DIODE 1N4148M	
D627	8-719-987-63	DIODE 1N4148M	
D628	8-719-987-63	DIODE 1N4148M	
D1131	8-719-313-48	LED SEL6210S-TH12 (TAPE)	
D1132	8-719-313-48	LED SEL6210S-TH12 (CD)	
D1133	8-719-313-48	LED SEL6210S-TH12 (TUNER)	
D1134	8-719-313-48	LED SEL6210S-TH12 (VIDEO)	
D1145	8-719-038-63	LED SEL5220S-TH8C (VOLUME)	
D1150	8-719-987-63	DIODE 1N4148M	
D1151	8-719-987-63	DIODE 1N4148M	
D1152	8-719-987-63	DIODE 1N4148M	
D1160	8-719-038-63	LED SEL5220S-TH8C (FLAT)	
D1161	8-719-038-63	LED SEL5220S-TH8C (DANCE)	
D1162	8-719-038-63	LED SEL5220S-TH8C (POPS)	
D1163	8-719-038-63	LED SEL5220S-TH8C (ROCK)	
D1164	8-719-038-63	LED SEL5220S-TH8C (CLASSIC)	
D1171	8-719-987-63	DIODE 1N4148M	
< FLUORESCENT INDICATOR >			
FL601	1-517-259-11	INDICATOR TUBE, FLUORESCENT	
< IC >			
IC601	8-759-325-41	IC uPD78042AGF-022-3B9	
IC602	8-749-920-83	IC GP1U52XB	
IC1101	8-759-634-51	IC M5218AP	
IC1102	8-759-634-51	IC M5218AP	
IC1103	8-759-820-62	IC LB1639	
IC1104	8-759-916-12	IC SN74HC00AN	
IC1106	8-759-000-48	IC MC14052BCP	
< COIL >			
L601	1-410-521-11	INDUCTOR 100uH	

Ref. No.	Part No.	Description	Remark
< TRANSISTOR >			
Q601	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q602	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q603	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1102	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q1103	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1104	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1105	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1121	8-729-422-57	TRANSISTOR UN4111	
Q1124	8-729-900-36	TRANSISTOR DTC124ES	
Q1125	8-729-900-36	TRANSISTOR DTC124ES	
Q1126	8-729-900-36	TRANSISTOR DTC124ES	
Q1141	8-729-900-63	TRANSISTOR DTA124ES	
Q1143	8-729-900-80	TRANSISTOR DTC114ES	
Q1144	8-729-900-80	TRANSISTOR DTC114ES	
Q1145	8-729-422-57	TRANSISTOR UN4111	
Q1147	8-729-900-36	TRANSISTOR DTC124ES	
Q1148	8-729-900-63	TRANSISTOR DTA124ES	
Q1152	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q1153	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1154	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1155	8-729-119-78	TRANSISTOR 2SC2785-HFE	
< RESISTOR >			
R601	1-249-417-11	CARBON 1K 5% 1/4W	
R603	1-249-437-11	CARBON 47K 5% 1/4W	
R604	1-247-863-91	CARBON 22K 5% 1/4W	
R605	1-247-863-91	CARBON 22K 5% 1/4W	
R606	1-249-429-11	CARBON 10K 5% 1/4W	
R607	1-249-429-11	CARBON 10K 5% 1/4W	
R608	1-249-423-11	CARBON 3.3K 5% 1/4W	
R609	1-249-417-11	CARBON 1K 5% 1/4W	
R610	1-249-425-11	CARBON 4.7K 5% 1/4W	
R611	1-249-429-11	CARBON 10K 5% 1/4W	
R613	1-249-429-11	CARBON 10K 5% 1/4W	
R614	1-249-429-11	CARBON 10K 5% 1/4W	
R615	1-247-863-91	CARBON 22K 5% 1/4W	
R616	1-247-863-91	CARBON 22K 5% 1/4W	
R621	1-249-419-11	CARBON 1.5K 5% 1/4W	
R622	1-247-807-31	CARBON 100 5% 1/4W	
R623	1-249-406-11	CARBON 120 5% 1/4W	
R624	1-249-406-11	CARBON 120 5% 1/4W	
R635	1-249-419-11	CARBON 1.5K 5% 1/4W	
R636	1-247-807-31	CARBON 100 5% 1/4W	
R637	1-249-406-11	CARBON 120 5% 1/4W	
R638	1-249-406-11	CARBON 120 5% 1/4W	
R639	1-249-407-11	CARBON 150 5% 1/4W	
R640	1-249-408-11	CARBON 180 5% 1/4W	

PANEL

Ref. No.	Part No.	Description	Remark
R641	1-247-815-91	CARBON	220 5% 1/4W
R642	1-249-410-11	CARBON	270 5% 1/4W
R643	1-249-411-11	CARBON	330 5% 1/4W
R644	1-249-413-11	CARBON	470 5% 1/4W
R645	1-249-414-11	CARBON	560 5% 1/4W
R646	1-249-416-11	CARBON	820 5% 1/4W
R647	1-249-418-11	CARBON	1. 2K 5% 1/4W
R648	1-249-421-11	CARBON	2. 2K 5% 1/4W
R649	1-249-424-11	CARBON	3. 9K 5% 1/4W
R661-666	1-249-417-11	CARBON	1K 5% 1/4W
R672	1-249-441-11	CARBON	100K 5% 1/4W
R673	1-247-815-91	CARBON	220 5% 1/4W
R1102	1-249-426-11	CARBON	5. 6K 5% 1/4W
R1103	1-249-431-11	CARBON	15K 5% 1/4W
R1104	1-249-425-11	CARBON	4. 7K 5% 1/4W
R1105	1-247-863-91	CARBON	22K 5% 1/4W
R1110	1-249-417-11	CARBON	1K 5% 1/4W
R1111	1-249-441-11	CARBON	100K 5% 1/4W
R1114	1-249-431-11	CARBON	15K 5% 1/4W
R1115	1-249-439-11	CARBON	68K 5% 1/4W
R1116	1-249-423-11	CARBON	3. 3K 5% 1/4W
R1117	1-249-440-11	CARBON	82K 5% 1/4W
R1118	1-249-412-11	CARBON	390 5% 1/4W
R1119	1-249-427-11	CARBON	6. 8K 5% 1/4W
R1120	1-247-862-11	CARBON	20K 5% 1/4W
R1122	1-247-863-91	CARBON	22K 5% 1/4W
R1123	1-249-421-11	CARBON	2. 2K 5% 1/4W
R1124	1-249-425-11	CARBON	4. 7K 5% 1/4W
R1125	1-247-863-91	CARBON	22K 5% 1/4W
R1126	1-249-420-11	CARBON	1. 8K 5% 1/4W
R1127	1-249-440-11	CARBON	82K 5% 1/4W
R1128	1-249-412-11	CARBON	390 5% 1/4W
R1129	1-249-427-11	CARBON	6. 8K 5% 1/4W
R1130	1-247-862-11	CARBON	20K 5% 1/4W
R1131	1-249-434-11	CARBON	27K 5% 1/4W
R1132	1-249-412-11	CARBON	390 5% 1/4W
R1135	1-247-863-91	CARBON	22K 5% 1/4W
R1136-1138	1-249-412-11	CARBON	390 5% 1/4W
R1139	1-249-417-11	CARBON	1K 5% 1/4W
R1141	1-249-437-11	CARBON	47K 5% 1/4W
R1142	1-249-412-11	CARBON	390 5% 1/4W
R1143	1-249-427-11	CARBON	6. 8K 5% 1/4W
R1145	1-249-412-11	CARBON	390 5% 1/4W
R1149	1-247-874-11	CARBON	62K 5% 1/4W
R1152	1-249-426-11	CARBON	5. 6K 5% 1/4W
R1154	1-249-425-11	CARBON	4. 7K 5% 1/4W
R1155	1-247-863-91	CARBON	22K 5% 1/4W

Ref. No.	Part No.	Description	Remark
R1160	1-249-417-11	CARBON	1K 5% 1/4W
R1161	1-249-441-11	CARBON	100K 5% 1/4W
R1164	1-249-431-11	CARBON	15K 5% 1/4W
R1165	1-249-439-11	CARBON	68K 5% 1/4W
R1166	1-249-423-11	CARBON	3. 3K 5% 1/4W
R1167	1-249-440-11	CARBON	82K 5% 1/4W
R1168	1-249-412-11	CARBON	390 5% 1/4W
R1169	1-249-427-11	CARBON	6. 8K 5% 1/4W
R1170	1-247-862-11	CARBON	20K 5% 1/4W
R1172	1-247-863-91	CARBON	22K 5% 1/4W
R1173	1-249-421-11	CARBON	2. 2K 5% 1/4W
R1174	1-249-425-11	CARBON	4. 7K 5% 1/4W
R1176	1-249-420-11	CARBON	1. 8K 5% 1/4W
R1177	1-249-440-11	CARBON	82K 5% 1/4W
R1178	1-249-412-11	CARBON	390 5% 1/4W
R1179	1-249-427-11	CARBON	6. 8K 5% 1/4W
R1180	1-247-862-11	CARBON	20K 5% 1/4W
R1181	1-249-434-11	CARBON	27K 5% 1/4W
R1183-1185	1-249-437-11	CARBON	47K 5% 1/4W
R1189	1-249-417-11	CARBON	1K 5% 1/4W
R1191	1-249-437-11	CARBON	47K 5% 1/4W
R1192	1-249-412-11	CARBON	390 5% 1/4W
R1193	1-249-427-11	CARBON	6. 8K 5% 1/4W
R1194	1-247-863-91	CARBON	22K 5% 1/4W
R1195	1-249-425-11	CARBON	4. 7K 5% 1/4W
R1196	1-249-425-11	CARBON	4. 7K 5% 1/4W
R1199	1-247-874-11	CARBON	62K 5% 1/4W

< COMPOSITION CIRCUIT BLOCK >

RP601	1-239-598-11	COMPOSITION CIRCUIT BLOCK (100KX8)
RP602	1-232-998-11	COMPOSITION CIRCUIT BLOCK (100KX7)

< VARIABLE RESISTOR >

RV1101	1-223-251-11	RES, VAR, CARBON 100K/100K (SURROUND)
RV1109	1-223-539-12	RES, VAR, CARBON 100K/100K (VOLUME)

< SWITCH >

S601	1-554-303-21	SWITCH, TACTILE (BAND)
S602	1-554-303-21	SWITCH, TACTILE (SHIFT)
S603	1-554-303-21	SWITCH, TACTILE (- (DUAL MODE TUNING))
S604	1-554-303-21	SWITCH, TACTILE (+ (DUAL MODE TUNING))
S616	1-554-303-21	SWITCH, TACTILE (MEMORY)
S617	1-554-303-21	SWITCH, TACTILE (STEREO/MONO)
S620	1-554-303-21	SWITCH, TACTILE (TAPE)
S621	1-554-303-21	SWITCH, TACTILE (CD)
S622	1-554-303-21	SWITCH, TACTILE (TUNER)
S623	1-554-303-21	SWITCH, TACTILE (VIDEO)

PANEL

POWER

POWER AMPLIFIER

Ref. No.	Part No.	Description	Remark
S624	1-554-303-21	SWITCH, TACTILE (TUNING/PRESET)	
S625	1-554-303-21	SWITCH, TACTILE (FLAT (PRESET EQUALIZER))	
S626	1-554-303-21	SWITCH, TACTILE (DANCE (PRESET EQUALIZER))	
S627	1-554-303-21	SWITCH, TACTILE (POPS (PRESET EQUALIZER))	
S628	1-554-303-21	SWITCH, TACTILE (ROCK (PRESET EQUALIZER))	
S629	1-554-303-21	SWITCH, TACTILE (CLASSIC (PRESET EQUALIZER))	

< VIBRATOR >

X601 1-567-775-11 VIBRATOR, CERAMIC (4.19MHz)

* 1-650-434-21 POWER BOARD (Canadian)

1-533-217-31 HOLDER, FUSE

< CAPACITOR >

△C1301	1-161-744-51	CERAMIC	0.01uF	400V
C1348	1-164-159-11	CERAMIC	0.1uF	50V

< CONNECTOR >

CN1350 1-580-230-11 PIN, CONNECTOR (PC BOARD) 3P

* CN1351 1-568-226-11 PIN, CONNECTOR 2P

< FUSE >

△F1301-1304

1-576-108-11 FUSE (4A/125V)

< RESISTOR >

△R1391	1-202-725-00	SOLID	3.3M	10%	1/2W
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< TRANSFORMER >

△T1301 1-427-731-11 TRANSFORMER, POWER

* A-4371-530-A POWER AMPLIFIER BOARD, COMPLETE
(Canadian)

* A-4377-807-A POWER AMPLIFIER BOARD, COMPLETE (US)

< CAPACITOR >

C1201	1-124-925-11	ELECT	2.2uF	20%	100V
C1202	1-162-286-21	CERAMIC	220PF	10%	50V
C1203	1-162-286-21	CERAMIC	220PF	10%	50V
C1204	1-124-910-11	ELECT	47uF	20%	50V
C1205	1-124-910-11	ELECT	47uF	20%	50V
C1206	1-124-122-11	ELECT	100uF	20%	50V

Ref. No.	Part No.	Description	Remark
C1207	1-136-165-00	FILM	0.1uF 5% 50V (Canadian)
C1207	1-164-159-11	CERAMIC	0.1uF 50V (US)
C1208	1-124-916-11	ELECT	22uF 20% 63V
C1209	1-136-165-00	FILM	0.1uF 5% 50V (Canadian)
C1209	1-164-159-11	CERAMIC	0.1uF 50V (US)
C1210	1-136-163-00	FILM	0.068uF 5% 50V
C1211	1-136-163-00	FILM	0.068uF 5% 50V
C1220	1-104-666-11	ELECT	220uF 20% 6.3V (US)
C1220	1-126-966-11	ELECT	33uF 20% 50V (Canadian)
C1251	1-124-925-11	ELECT	2.2uF 20% 100V
C1252	1-162-286-21	CERAMIC	220PF 10% 50V
C1253	1-162-286-21	CERAMIC	220PF 10% 50V
C1254	1-124-910-11	ELECT	47uF 20% 50V
C1255	1-124-910-11	ELECT	47uF 20% 50V
C1256	1-124-122-11	ELECT	100uF 20% 50V
C1257	1-136-165-00	FILM	0.1uF 5% 50V (Canadian)
C1257	1-164-159-11	CERAMIC	0.1uF 50V (US)
C1260	1-136-163-00	FILM	0.068uF 5% 50V
C1261	1-136-163-00	FILM	0.068uF 5% 50V

< CONNECTOR >

* CN1203 1-566-042-11 PIN, CONNECTOR 3P

< DIODE >

D1201	8-719-987-63	DIODE	1N4148M
D1203	8-719-987-63	DIODE	1N4148M (US)
D1205	8-719-987-63	DIODE	1N4148M (US)
D1251	8-719-987-63	DIODE	1N4148M

< IC >

IC1201	8-749-900-24	IC	STK-4162MK2 (US)
IC1201	8-749-900-96	IC	STK-4142MK2 (Canadian)

< TRANSISTOR >

Q1201	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA
Q1202	8-729-900-80	TRANSISTOR	DTC114ES (Canadian)
Q1203	8-729-119-78	TRANSISTOR	2SC2785-HFE (Canadian)
Q1251	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA

< RESISTOR >

R1201	1-249-417-11	CARBON	1K	5%	1/4W
R1202	1-249-438-11	CARBON	56K	5%	1/4W

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

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POWER AMPLIFIER

POWER PRIMARY

POWER SECONDARY

SW

TABLE MOTOR

Ref. No.	Part No.	Description			Remark
R1203	1-249-414-11	CARBON	560	5%	1/4W
R1204	1-249-438-11	CARBON	56K	5%	1/4W
R1205-1208					
	1-249-425-11	CARBON	4.7K	5%	1/4W
△R1209	1-212-881-11	FUSIBLE	100	5%	1/4W F
△R1210	1-217-151-00	METAL PLATE	0.22		2W F
R1211	1-249-417-11	CARBON	1K	5%	1/4W
R1212	1-249-431-11	CARBON	15K	5%	1/4W
R1213	1-249-441-11	CARBON	100K	5%	1/4W
R1214-1217					
	1-249-421-11	CARBON	2.2K	5%	1/4W
R1218	1-249-393-11	CARBON	10	5%	1/4W
R1227	1-249-429-11	CARBON	10K	5%	1/4W (Canadian)
R1227	1-249-432-11	CARBON	18K	5%	1/4W (US)
R1228	1-247-881-00	CARBON	120K	5%	1/4W
R1229	1-249-429-11	CARBON	10K	5%	1/4W (US)
R1229	1-249-437-11	CARBON	47K	5%	1/4W (Canadian)
R1230	1-249-423-11	CARBON	3.3K	5%	1/4W (US)
R1230	1-249-439-11	CARBON	68K	5%	1/4W (Canadian)
R1231	1-249-417-11	CARBON	1K	5%	1/4W (Canadian)
R1232	1-249-434-11	CARBON	27K	5%	1/4W (Canadian)
R1238	1-247-863-91	CARBON	22K	5%	1/4W (Canadian)
R1239	1-249-426-11	CARBON	5.6K	5%	1/4W (Canadian)
△R1243	1-217-637-00	FUSIBLE	1	5%	1/4W F (US)
△R1243	1-249-389-11	CARBON	4.7	5%	1/4W F (Canadian)
R1251	1-249-417-11	CARBON	1K	5%	1/4W
R1252	1-249-438-11	CARBON	56K	5%	1/4W
R1253	1-249-414-11	CARBON	560	5%	1/4W
R1254	1-249-438-11	CARBON	56K	5%	1/4W
R1255-1258					
	1-249-425-11	CARBON	4.7K	5%	1/4W
△R1259	1-212-881-11	FUSIBLE	100	5%	1/4W F
△R1260	1-217-151-00	METAL PLATE	0.22		2W F
R1261	1-249-417-11	CARBON	1K	5%	1/4W
R1262	1-249-431-11	CARBON	15K	5%	1/4W
R1263	1-249-441-11	CARBON	100K	5%	1/4W
R1268	1-249-393-11	CARBON	10	5%	1/4W

Ref. No.	Part No.	Description			Remark
*	1-656-897-11	POWER PRIMARY BOARD (US)			

	1-533-217-31	HOLDER, FUSE			
		< CAPACITOR >			
△C1301	1-161-744-51	CERAMIC	0.01uF		400V
		< CONNECTOR >			
CN1350	1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P			
CN1351	1-564-321-00	PIN, CONNECTOR 2P			
		< FUSE >			
△F1211	1-533-419-11	FUSE (4A/125V)			
		< RESISTOR >			
△R1391	1-202-725-00	SOLID	3.3M 10%	1/2W	

*	1-656-896-11	POWER SECONDARY BOARD (US)			

	1-533-217-31	HOLDER, FUSE			
		< CAPACITOR >			
C1348	1-164-159-11	CERAMIC	0.1uF		50V
		< FUSE >			
△F1303	1-533-419-11	FUSE (4A/125V)			
△F1304	1-533-419-11	FUSE (4A/125V)			

*	1-653-356-11	SW BOARD			

		< CONNECTOR >			
* CN951	1-568-942-11	PIN, CONNECTOR 4P			
		< SWITCH >			
S951	1-692-785-11	SWITCH, PUSH (3 KEY) (DOLBY NR/TAPE SELECT/DUBBING SPEED)			

*	1-638-729-11	TABLE MOTOR BOARD			

		< CAPACITOR >			
C704	1-162-302-11	CERAMIC	0.0022uF	30%	16V

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TABLE MOTOR

Ref. No.	Part No.	Description	Remark
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< CONNECTOR >

* CN707	1-573-044-11	SOCKET, CONNECTOR 5P	
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< DIODE >

D701	8-719-970-19	PHOTO SENSOR GP1A521	
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< RESISTOR >

R701	1-249-416-11	CARBON 820 5% 1/4W	
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MISCELLANEOUS

5	1-751-026-11	WIRE (FLAT TYPE) (11 CORE)	
6	1-751-747-11	WIRE (FLAT TYPE) (23 CORE)	
7	1-765-234-11	CORD, CONNECTION (17 CORE)	
△10	1-690-609-21	CORD, POWER	
* 58	1-690-708-11	CORD (WITH CONNECTOR) (US)	
58	1-765-058-11	CORD (WITH CONNECTOR) (Canadian)	
* 107	1-452-538-11	MAGNET	
158	1-765-195-11	WIRE (FLAT TYPE) (7 CORE)	
167	1-537-645-11	JUMPER, FILM (WITH TERMINAL)	
169	1-590-849-11	WIRE, FLAT TYPE (5 CORE)	
△201	8-848-144-11	PICK-UP, OPTICAL KSS-240A	
202	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
△F1211	1-533-419-11	FUSE (4A/125V) (US)	
△F1301	1-576-108-11	FUSE (4A/125V) (Canadian)	
△F1302	1-576-108-11	FUSE (4A/125V) (Canadian)	
△F1303	1-533-419-11	FUSE (4A/125V) (US)	
△F1303	1-576-108-11	FUSE (4A/125V) (Canadian)	
△F1304	1-533-419-11	FUSE (4A/125V) (US)	
△F1304	1-576-108-11	FUSE (4A/125V) (Canadian)	
HE901	1-543-673-11	HEAD, MAGNETIC (ERASE) (DECK B)	
HP901	1-543-319-11	HEAD, MAGNETIC (PB) (DECK A)	
HRP901	1-543-319-11	HEAD, MAGNETIC (REC/PB) (DECK B)	
M101	X-4917-504-1	MOTOR ASSY (SLED MOTOR)	
M102	X-4917-523-4	BASE (OUTSERT) ASSY (SPINDLE MOTOR)	
M701	A-4353-976-A	MOTOR ASSY, ROTARY	
M702	A-4353-974-A	MOTOR ASSY, LOADING	
M901	X-3362-377-1	MOTOR (WH) ASSY	
S701	1-572-713-11	SWITCH, PUSH (WITH CONNECTOR) (DOWN)	
△S1301	1-572-267-61	SWITCH, PUSH (AC POWER) (1 KEY) (POWER)	
△T1301	1-427-731-11	TRANSFORMER, POWER (Canadian)	
△T1301	1-427-926-11	TRANSFORMER, POWER (US)	

Ref. No.	Part No.	Description	Remark
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ACCESSORIES & PACKING MATERIALS

	1-467-430-11	COMMANDER, STANDARD (RM-S221)	
*	3-376-136-01	CUSHION (HALF)	
	4-941-762-01	COVER (MLY), BATTERY (For RM-S221)	
*	4-963-173-11	CUSHION	
*	4-973-139-02	CUSHION	

HARDWARE LIST

#1	7-621-255-15	SCREW +P 2X3	
#2	7-621-775-20	SCREW +B 2.6X5	
#3	7-623-921-01	RING, RETAINING, CAPSTAN	
#4	7-682-554-04	SCREW +B 3X25	
#5	7-685-650-79	SCREW +BVTP 3X16 TYPE2 N-S	
#6	7-685-103-19	SCREW +P 2X5 TYPE2 NON-SLIT	
#7	7-685-133-19	SCREW +P 2.6X6 TYPE2	
#8	7-682-961-01	SCREW +PSW 4X8	
#9	7-685-135-19	SCREW +BTP 2.6X10 TYPE2 N-S	
#10	7-685-136-19	SCREW +P 2.6X12 TYPE2 NON-SLIT	
#11	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#12	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#13	7-688-001-01	W 2, SMALL	
#14	7-621-849-00	SCREW, TAPPING	
#15	7-685-871-01	SCREW +BVTT 3X6 (S)	
#16	7-682-560-04	SCREW +BVTT 4X6 (S)	

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SS-G3000

SERVICE MANUAL

*US Model
Canadian Model*

SPECIFICATIONS

Speaker System	3-way speaker system
Mass	Approx. 3 kg PC speaker (6 lb 10 oz)
Dimensions	Approx. 220 × 395 × 180 mm (8 ³ / ₄ × 15 ⁵ / ₈ × 7 ¹ / ₈ inches) (w/h/d, including projections)

Design and specifications are subject to change without notice.



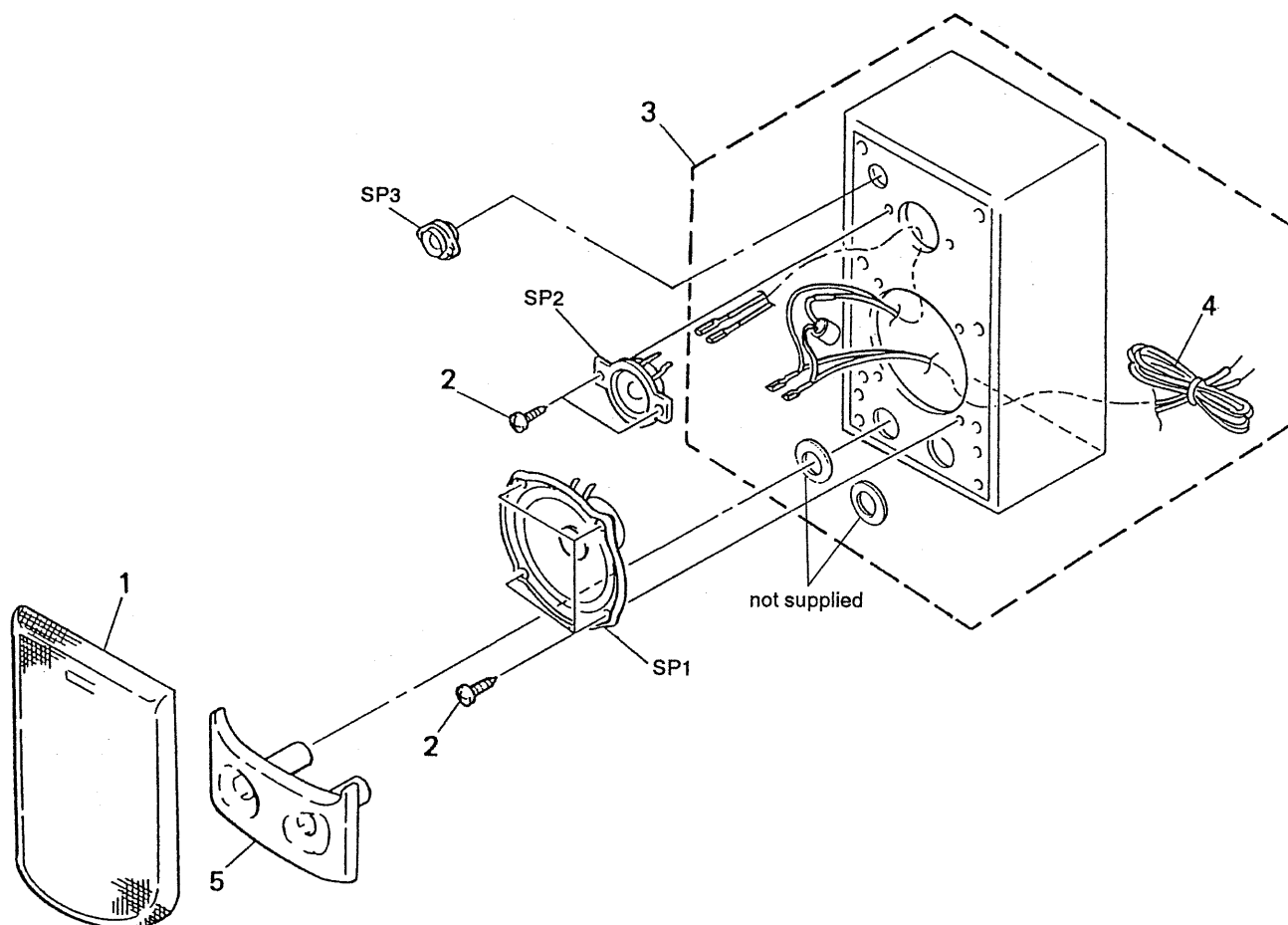
This is the speaker system in LBT-G3000.

SPEAKER SYSTEM
SONY®

EXPLODED VIEW AND PARTS LIST

NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.



Ref. No.	Part No.	Description	Remark
1	X-4944-820-1	FRAME ASSY, GRILLE	
2	4-874-614-61	SCREW (M3. 5X16)	
* 3	A-4361-257-A	CABINET ASSY, SPEAKER	
4	1-575-696-11	CORD, SPEAKER (WITH CAPACITOR)	
* 5	X-4944-819-1	DUCT ASSY, ORNAMENTAL	
SP1	1-504-173-11	SPEAKER (16cm) (Canadian)	
SP1	1-544-451-31	SPEAKER (16cm) (US)	
SP2	1-504-174-11	SPEAKER (5cm)	
SP3	1-544-453-21	SPEAKER (2cm)	

Ref. No.	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS	

*	4-964-535-01	CUSHION	